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152.26
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3

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

3a

UPPER SUSQUEHANNA RIVER
WATERSHED. + 3b

3b

BINGHAMTON, CORNING & ELMIRA LOCAL PROTECTION PROJECTS

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~~U. S. Department~~ of Agriculture
~~Washington~~, D. C.

WAR DEPARTMENT
CORPS OF ENGINEERS

U. S. ENGINEER OFFICE
5a BINGHAMTON, N. Y.
5c
DECEMBER 1940

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LOCAL FLOOD PROTECTION PROJECTS

Southern New York Flood Control Project

INDEX

	Page No.
Binghamton, New York	2
Corning, New York	6
Elmira, New York	8

APR 7 - 1941

LOCAL FLOOD PROTECTION PROJECTS

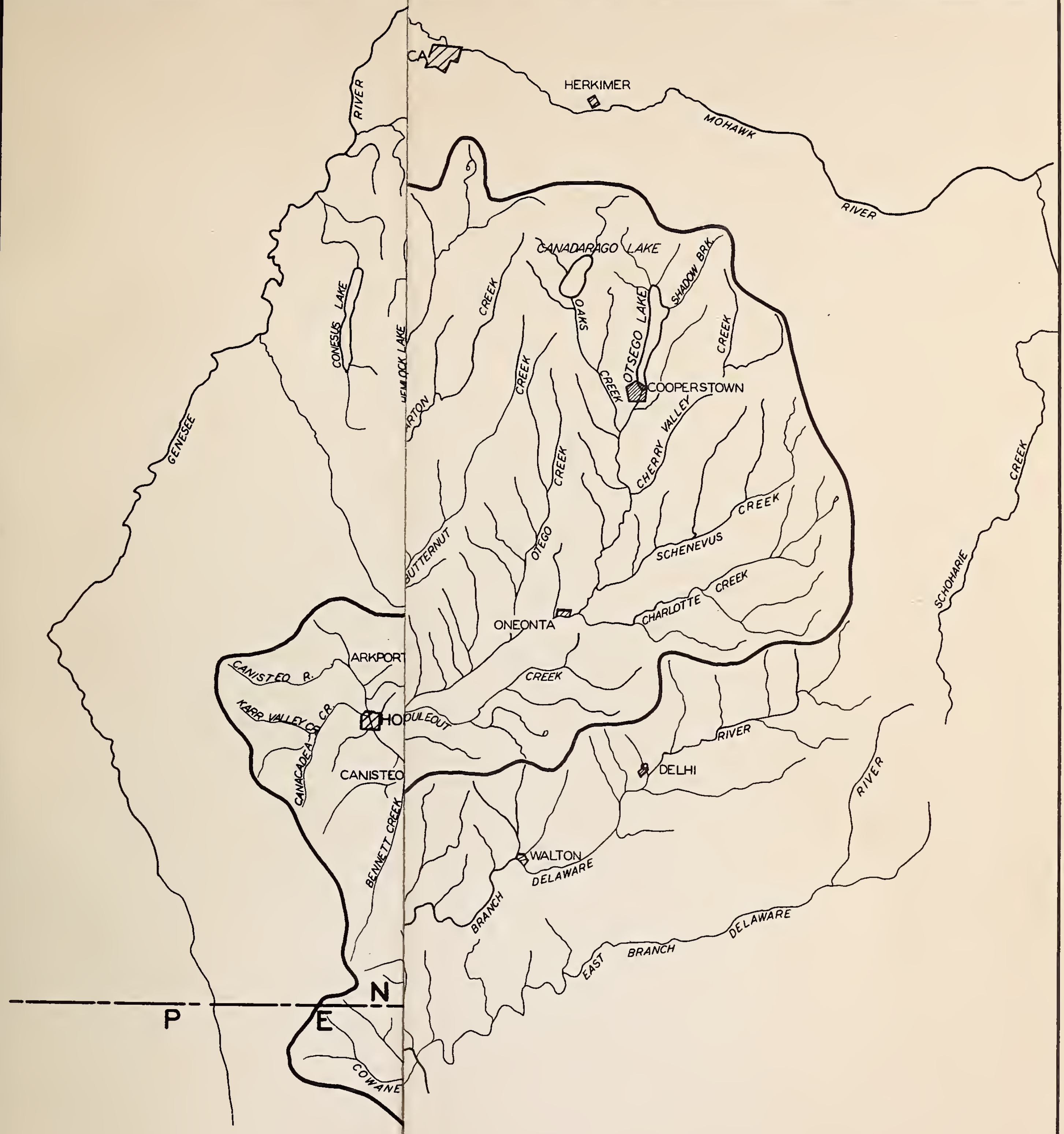
Southern New York Flood Control Project

Three of the main damage centers in southern New York are Binghamton, Corning, and Elmira (Plate 1). Local flood protection works are in the course of construction or in advanced stages of design at each of these localities.

The following pages show the general plans for these projects, together with pictures of the areas flooded and of the progress of the flood control works.

WAR DEPARTMENT

CORPS OF ENGINEERS U.S. ARMY


CA
HERKIMER
MOHAWK
RIVER
RIVER
CANADARAGO LAKE
SHADOW BRK.
OTSEGO LAKE
OAKS
CREEK
CREEK
CREEK
CONESUS LAKE
HEMLOCK LAKE
ARTON
CREEK
COOPERSTOWN
CHERRY VALLEY
GENESEE
CREEK
CREEK
SCHENEVUS
BUTTERNUT
OTEGO
CREEK
SCHOHARIE
CHARLOTTE
ONEONTA
ARKPORT
CANISTEO R.
CREEK
KARR VALLEY CR.
HO
OULEOUT
CANACADEA
CANISTEO
RIVER
DELHI
RIVER
BENNETT CREEK
WALTON
DELAWARE
BRANCH
DELAWARE
BRANCH
EAST
N
P
E
COWANE

SOUTHERN NEW YORK FLOOD CONTROL

UPPER SUSQUEHANNA RIVER WATERSHED

SCALE OF MILES

10 0 10 20

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y.

SUBMITTED:	RECOMMENDED:	APPROVED:
SENIOR ENGINEER	PRINCIPAL ENGINEER	MAJOR, CORPS OF ENGINEERS DISTRICT ENGINEER
TRACED BY : CHECKED BY :	FILE NO.	TO ACCOMPANY REPORT DATED:

PLATE I

WAR DEPARTMENT

CORPS OF ENGINEERS U.S. ARMY

NEW YORK STATE BARGE CANAL
CLYDE
RIVER
CANAL
SENECA RIVER
SYRACUSE
WAMPSVILLE
UTICA
HERKIMER
MOHAWK RIVER
RIVER
SENECA FALLS
AUBURN
GENEVA
CANANDAIGUA
CANANDAIGUA LAKE
CONESUS LAKE
HEMLOCK LAKE
HONEOYE LAKE
CANADICE LAKE
GENESEE
SKANEATELES LAKE
OWASCO LAKE
SENECA LAKE
CAYUGA LAKE
PENN YAN
KEUKA LAKE
TRUMANSBURG
ITHACA
FALL CR.
CAYUGA INLET
WATKINS
HAMMONDSPORT
TWELVE MILE CREEK
TEN MILE CREEK
FIVE MILE CREEK
SALMON CR.
AVOCA
ARKPORT
CANISTEO R.
KARR VALLEY CR.
HORNELL
CANACADEA CR.
CANISTEO
CANISTEO RIVER
BENNETT CREEK
COL BILLS CR.
TUSCARORA CREEK
COHOCTON
MUD CREEK
MEADS CREEK
RIVER
PAINTED POST
CORNING
TIOGA R.
PRESHO
CHEMUNG RIVER
NEWTOWN CREEK
ELMIRA
CAYUTA CREEK
CATATONK CREEK
WAVERLY
OWEGO
NORTH BRANCH
WEST BRANCH
EAST BRANCH OWEGO CREEK
DUDLEY CR.
LISLE
WHITNEY POINT
TIOUGHNIOGA RIVER
WEST BRANCH
EAST BRANCH
CORTLAND
MUD CREEK
OTSELIC CREEK
OTSELIC RIVER
GENEGANTSLET CREEK
CHENANGO RIVER
CHENANGO FORKS
BINGHAMTON
SUSQUEHANNA
RIVER
GREENE
OXFORD
NORWICH
CANASAWACTA CREEK
SAGE BROOK
GREAT BRK.
NEW BERLIN
SANGERFIELD RIVER
UNADILLA RIVER
WHARTON CREEK
BUTTERNUT CREEK
OTEGO CREEK
CANADARAGO LAKE
OAKS CREEK
OTSEGO LAKE
SHADOW BRK.
COOPERSTOWN
CHERRY VALLEY CREEK
SCHENEVUS CREEK
CHARLOTTE CREEK
ONEONTA
OULEOUT CREEK
SYDNEY
SUSQUEHANNA RIVER
DELHI
RIVER
WALTON
WEST BRANCH DELAWARE
EAST BRANCH DELAWARE
RIVER
SCHOHARIE CREEK
NORTH BRANCH
SUSQUEHANNA
N E W Y O R K
P E N N S Y L V A N I A
TROUPS CR.
RIVER
COWANESQUE
MILL CR.
CROOKED CREEK
TIOGA
TIOGA RIVER
SUGAR CREEK
TOWANDA
TOWANDA CREEK
NORTH BRANCH SUSQUEHANNA RIVER
SNAKE CREEK
MONTROSE
SCALE OF MILES
10
0
10
20

SOUTHERN NEW YORK FLOOD CONTROL

UPPER SUSQUEHANNA RIVER WATERSHED

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y.

SUBMITTED:	RECOMMENDED:	APPROVED:
SENIOR ENGINEER	PRINCIPAL ENGINEER	MAJOR, CORPS OF ENGINEERS DISTRICT ENGINEER
TRACED BY : CHECKED BY :	FILE NO.	TO ACCOMPANT REPORT DATED:

PLATE I

BINGHAMTON, NEW YORK

Binghamton, New York, presents one of the major flood problems in the upper Susquehanna River watershed. The city is at the junction of the Chenango and Susquehanna Rivers. Pierce, Park, Chamberlain, and Brandywine Creeks enter the rivers through the city. Frequent flooding by the rivers has caused serious damage to industries and business in the lower portions of the city. The floods of 1935 and 1936 were particularly severe, inundating much of the business section of the city. The flood of 1940 was comparable in volume to those of 1935 and 1936 but lasted a longer period, so that the inundation was much less. Plates 7 to 9 show pictures of this flood and protective works at the flooded areas. Plates 10 and 11 show other phases of the construction.

Certain protective works have been constructed on the rivers and creeks by local interests, but those on the rivers are inadequate and provide a very limited amount of protection. Numerous bridges and encroaching structures reduce the amount of protection that can be provided by walls and levees alone. The local works will therefore be supplemented by the Whitney Point Reservoir in the Chenango River Basin and by four authorized reservoirs in the Susquehanna River Basin.

The flood control works within the city will consist of flood walls and levees along both rivers, together with structures

on the creeks to eliminate flooding by backwater (Plates 2 and 3). The plan will increase the non-damaging capacity of the Susquehanna River from 50,000 to 80,000 cubic feet per second and that of the Chenango River from 42,000 to 75,000 c.f.s. The project is divided into four sections, being prosecuted as separate contracts. Section No. 1 consists of building walls and levees on the south bank of the Susquehanna River (Plate 4) extending for about 6,000 feet from the Exchange Street Bridge to high ground at Vestal Avenue, and constructing a conduit for Park Creek for about 1,200 feet between Vestal Avenue and the river. There will be about 2,000 feet of new concrete flood wall and about 4,000 feet of new levee. The construction of this section is now about 50 percent completed. The estimated date of completion is November 1941. Construction operations to date on Section No. 1 include the placement of about 65,000 cubic yards of earth fill in the levee embankments, the excavation of about 103,000 cubic yards of material, the pouring of about 800 cubic yards of concrete, the driving of about 26,000 square feet of sheet piling, and the installation of various drainage structures. The levee is about 80 percent completed, the concrete flood wall is about 35 percent completed, and work on the Park Creek conduit has just started.

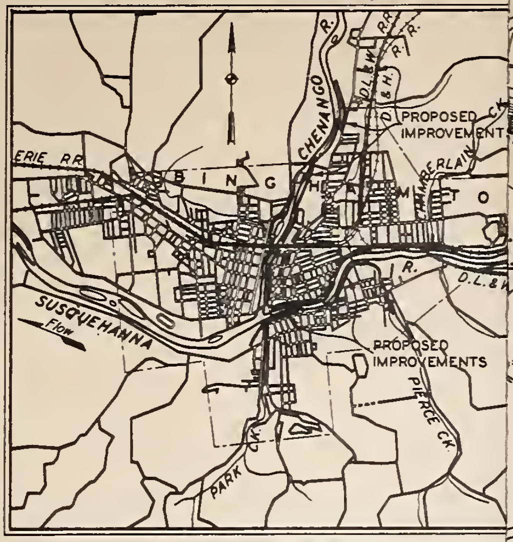
Section No. 2 of the improvement includes flood walls and levees on both the Chenango and Susquehanna Rivers (Plate 5). Levees from the Rockbottom Bridge to Pierce Creek and an improve-

ment of the channel of that stream will complete the protection of the south bank of the Susquehanna River. Flood walls and levees on the north bank of the Susquehanna River will extend from the Washington Street Bridge to high ground east of Rockbottom Bridge. The right bank of the Chenango River will be protected by flood walls and levees downstream to the Erie Railroad bridge, and the left bank by levees around low areas from Port Dickinson to the upper end of the Noyes Island raceway. Construction under contract on this section of the project started on July 15, 1940, and is now about 65 percent completed. The estimated date of completion is December 1941. Construction operations to date on Section No. 2 include the placement of about 316,000 cubic yards of earth fill in the levee embankment, the pouring of about 600 cubic yards of concrete, the driving of about 22,000 square feet of steel sheet piling, the excavation of about 496,000 cubic yards of material, and the installation of various drainage structures. Excavation operations are about 90 percent completed, embankment operations about 85 percent completed, sheet piling operations about 50 percent completed, and concrete operations about 15 percent completed.

Section No. 3 of the improvement includes construction of 650 linear feet of new concrete flood wall, raising of about 970 linear feet of existing concrete flood wall, and appurtenant drainage structures (Plate 6). This section will protect the right

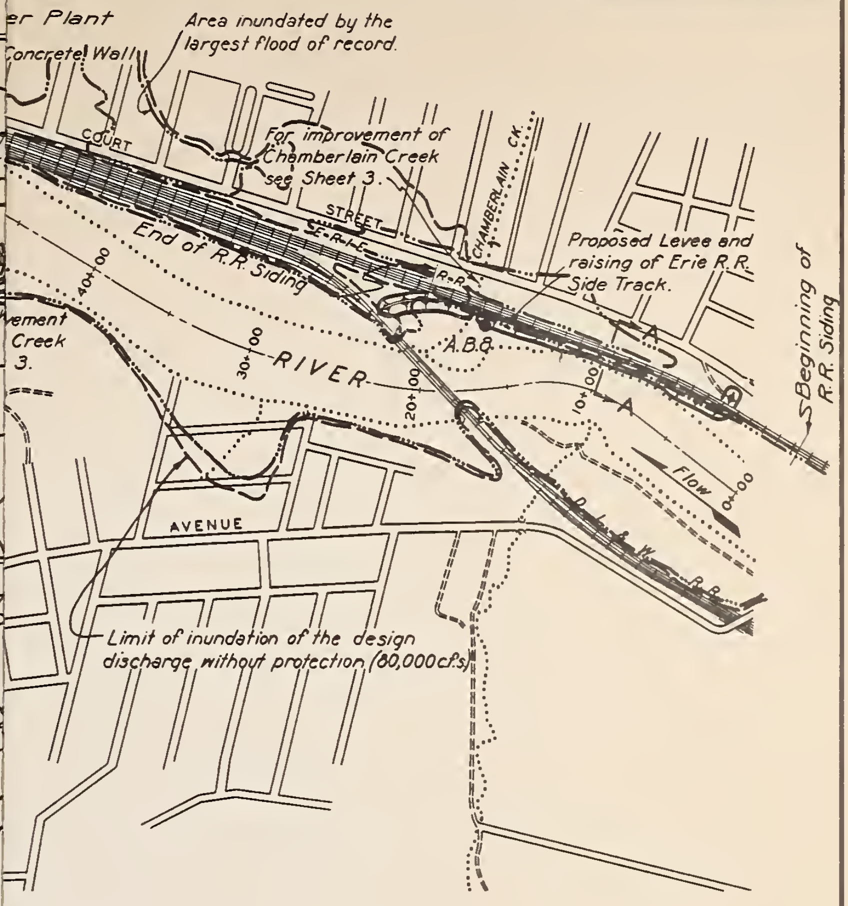
side of the Susquehanna River from the Tompkins Street Bridge upstream to the embankments of the Erie and the Delaware, Lackawanna and Western Railroads, together with much of the central part of the city, including the city waterworks. Construction, under contract, on this section is expected to start in December 1940, and to be completed within 300 days.

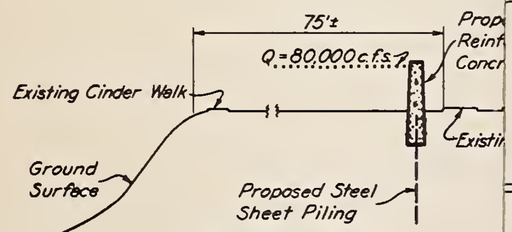
Section No. 4 of the improvement will complete the flood protection works and will consist of concrete flood walls and appurtenant drainage structures along the right bank of the Chenango River below the Erie Railroad bridge and along the left bank from the upper end of the Noyes Island raceway to the Washington Street Bridge (Plates 2 and 3). Plans for this section of the improvement are being prepared and work will be begun as soon as possible.


ERIE R.R.
BINGHAMTON
CHENANGO R.
D.L.&W. R.R.
D.&H. R.R.
PROPOSED IMPROVEMENTS
CHAMBERLAIN
SUSQUEHANNA
Flow
D.L.&W.
PROPOSED IMPROVEMENTS
PIERCE CK.
PARK CK.

VICINITY MAP

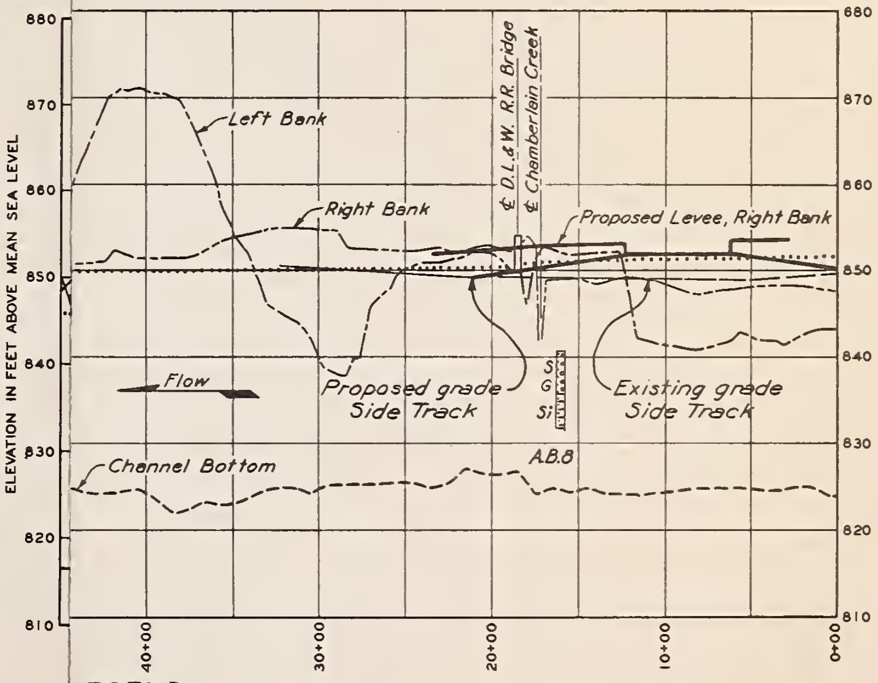
SCALE
1 0 1 2 MILES

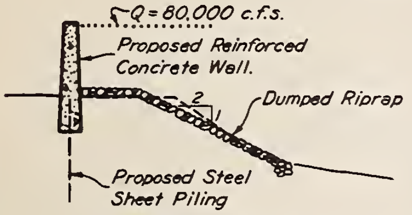

er Plant
Concrete Wall
Area inundated by the largest flood of record.
COURT
For improvement of Chamberlain Creek see Sheet 3.
STREET
CHAMBERLAIN CK.
Proposed Levee and raising of Erie R.R. Side Track.
Beginning of R.R. Siding
End of R.R. Siding
ERIE R.R.
ement Creek 3.
40+00
30+00
RIVER
20+00
A.B.8
10+00
A
A
Flow
0+00
D.L.&W. R.R.
AVENUE
Limit of inundation of the design discharge without protection (80,000 c.f.s.)


75'±
Q=80,000 c.f.s.
Prop
Reinf
Concr
Existing Cinder Walk
Existi
Ground Surface
Proposed Steel Sheet Piling

SECTION F–F

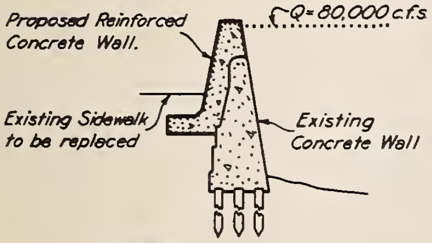
SCALE
10 0 10 20 FEET




Q=80,000 c.f.s.
Proposed Reinforced Concrete Wall.
2
1
Dumped Riprap
Proposed Steel Sheet Piling

SECTION D–D

SCALE
10 0 10 20 FEET


Proposed Reinforced Concrete Wall.
Q=80,000 c.f.s
Existing Sidewalk to be replaced
Existing Concrete Wall

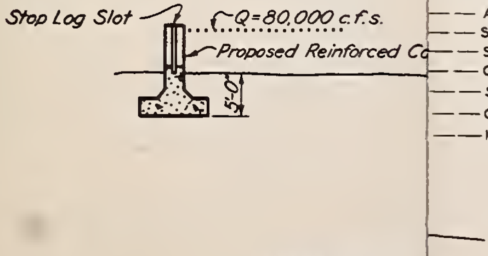
SECTION C–C

SCALE
10 0 10 20 FEET

LEGEND

——TEST PIT
——DRILL HOLE
——AUGER BORING
——SAND
——SILT
——CLAY
——SAND AND SILT
——GRAVEL
——MISC. FILLED MAT'L.

NOTE: ELEVATIONS ARE IN FEET AND REFER TO THE PLANE OF MEAN SEA LEVEL AT SANDY HOOK N.J.


Stop Log Slot
Q=80,000 c.f.s.
Proposed Reinforced Co
5'-0"

SECTION E

SCALE
10 0 10

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

LOCAL IMPROVEMENT PROJECT

BINGHAMTON, N.Y.

SCALES: AS SHOWN

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. MAY 20, 1939

SUBMITTED:	RECOMMENDED:	APPROVED:
J. L. Rathan	P. T. Tife	
SENIOR ENGINEER	PRINCIPAL ENGINEER	MAJOR, CORPS OF ENGINEERS U.S. ARMY, DISTRICT ENGINEER

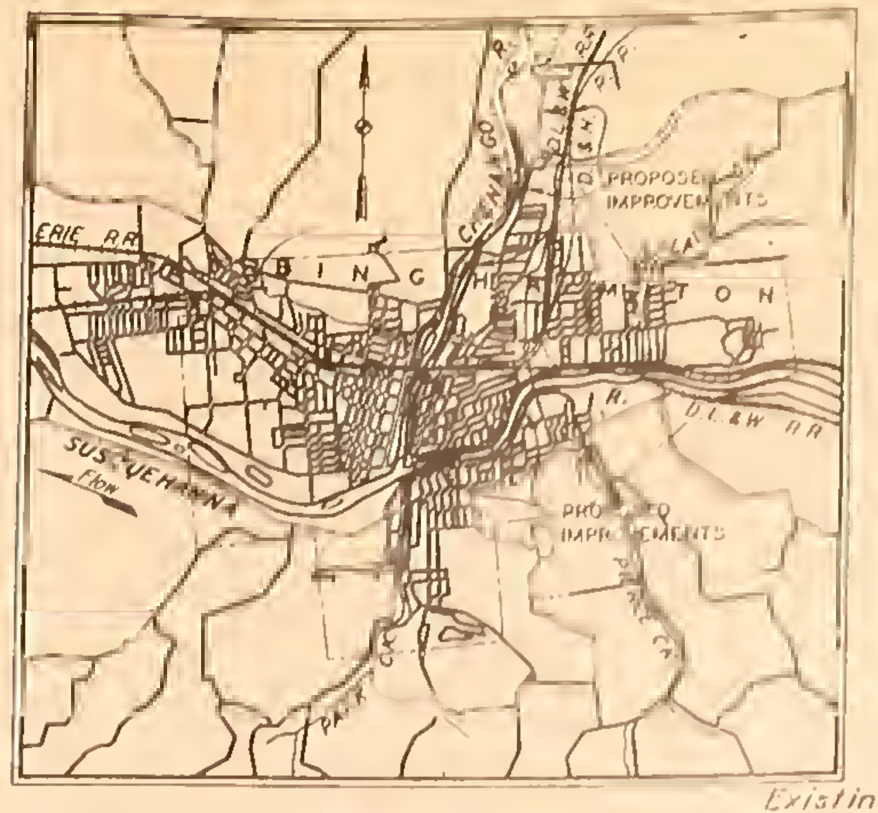
DRAWN BY: F.A.D.
TRACED BY: R.E.G.
CHECKED BY: A.L.

FILE NO. 6403-1

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY

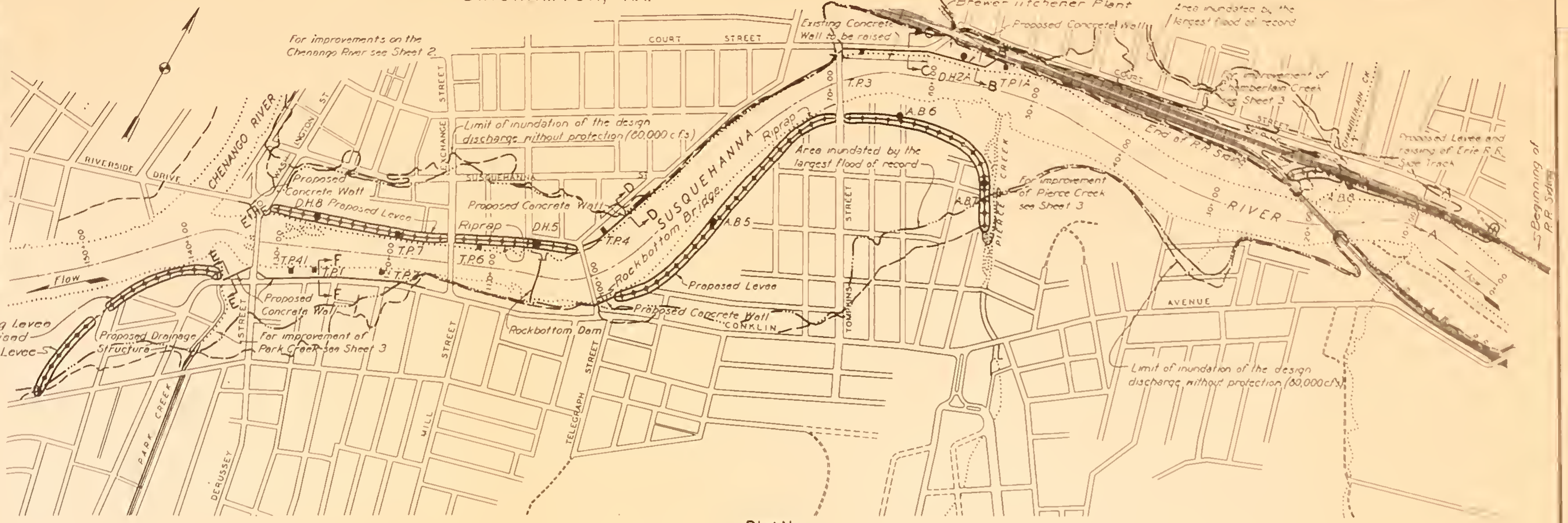
BINGHAMTON, N.Y.


ERIE R.R.
BINGHAMTON
CHENANGO
PROPOSED IMPROVEMENTS
D.L.&W. R.R.
SUSQUEHANNA
Flow
PROPOSED IMPROVEMENTS

VICINITY MAP

SCALE

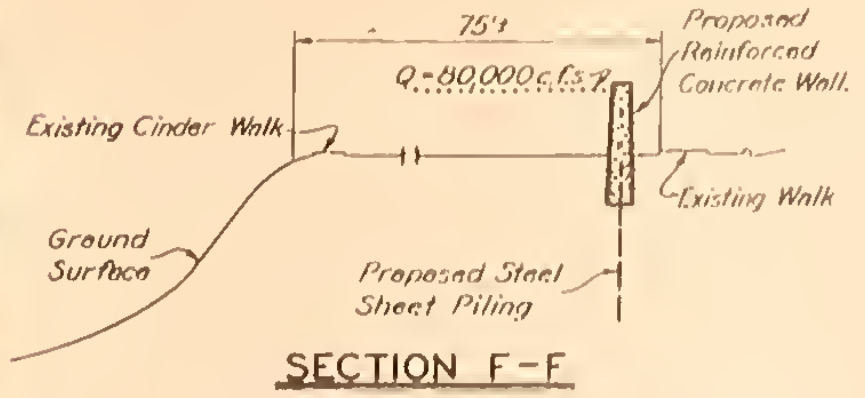
1 0 1 2 MILES


Brewer Titchener Plant
Proposed Concrete Wall
Area inundated by the largest flood of record
Existing Concrete Wall to be raised
COURT STREET
For improvements on the Chenango River see Sheet 2.
For improvement of Chamberlain Creek see Sheet 3
Proposed Levee and raising of Erie R.R. Side Track
Beginning of R.R. Siding
End of R.R. Siding
Limit of inundation of the design discharge without protection (80,000 c.f.s.)
Area inundated by the largest flood of record
For improvement of Pierce Creek see Sheet 3
RIVERSIDE DRIVE
CHENANGO RIVER
EXCHANGE STREET
SUSQUEHANNA
Proposed Concrete Wall
D.H.8 Proposed Levee
Riprap
D.H.5
T.P.4
T.P.7
T.P.6
T.P.41
T.P.1
T.P.2
T.P.3
D.H.2A
T.P.1A
A.B.6
A.B.5
A.B.7
A.B.8
SUSQUEHANNA RIVER
Rockbottom Bridge
Riprap
Proposed Levee
Proposed Concrete Wall
Rockbottom Dam
CONKLIN
AVENUE
TOMPKINS STREET
PIERCE CREEK
Flow
Existing Levee to be raised
Proposed Levee
Proposed Drainage Structure
Proposed Concrete Wall
For improvement of Park Creek see Sheet 3
PARK CREEK
DE RUSSEY
WASHINGTON ST.
MILL STREET
TELEGRAPH STREET
Limit of inundation of the design discharge without protection (80,000 c.f.s.)
A
B
C
D
E
F

PLAN

SCALE

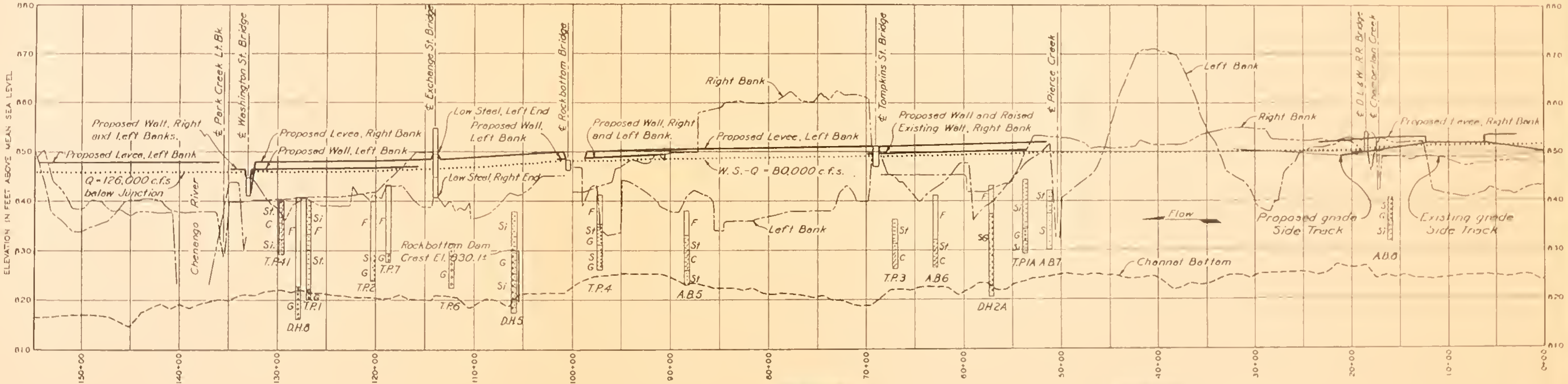
500 0 500 1000 FEET


75'±
Q=80,000 c.f.s.
Proposed Reinforced Concrete Wall.
Existing Cinder Walk
Existing Walk
Ground Surface
Proposed Steel Sheet Piling

SECTION F–F

SCALE

10 0 10 20 FEET

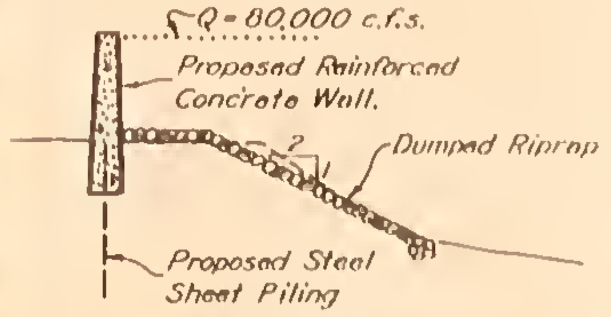


PROFILE

LEGEND

TP —— TEST PIT
DH —— DRILL HOLE
AB —— AUGER BORING
S —— SAND
Si —— SILT
C —— CLAY
St —— SAND AND SILT
G —— GRAVEL
F —— MISC. FILLED MAT'L.

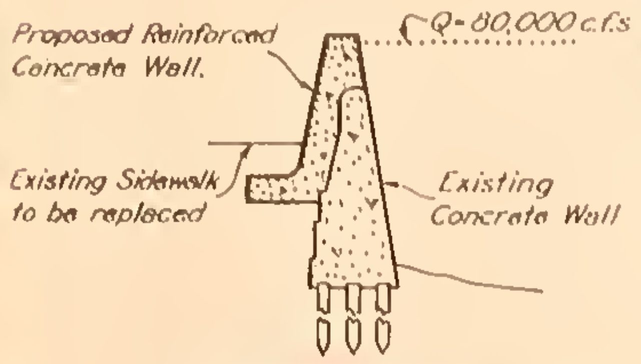
NOTE ELEVATIONS ARE IN FEET AND REFER TO THE PLANE OF MEAN SEA LEVEL AT SANDY HOOK N.J.


Q=80,000 c.f.s.
Proposed Reinforced Concrete Wall.
Dumped Riprap
2
1
Proposed Steel Sheet Piling

SECTION D–D

SCALE

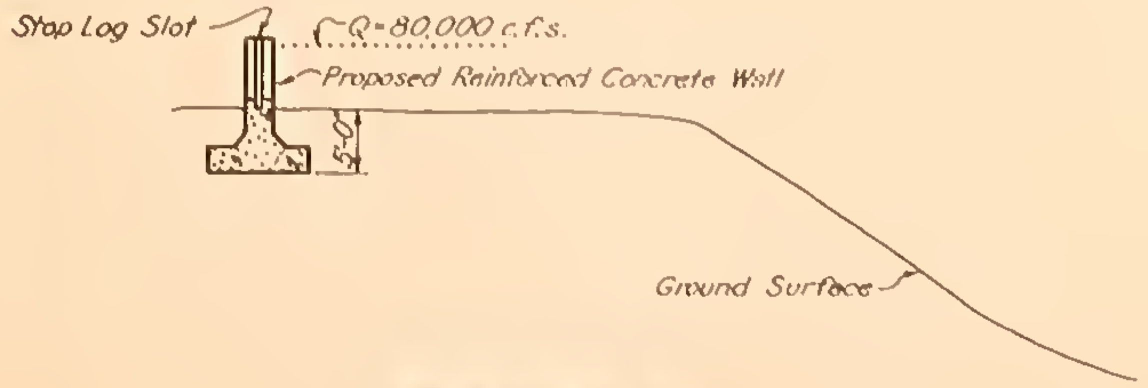
10 0 10 20 FEET


Proposed Reinforced Concrete Wall.
Q=80,000 c.f.s.
Existing Sidewalk to be replaced
Existing Concrete Wall

SECTION C–C

SCALE

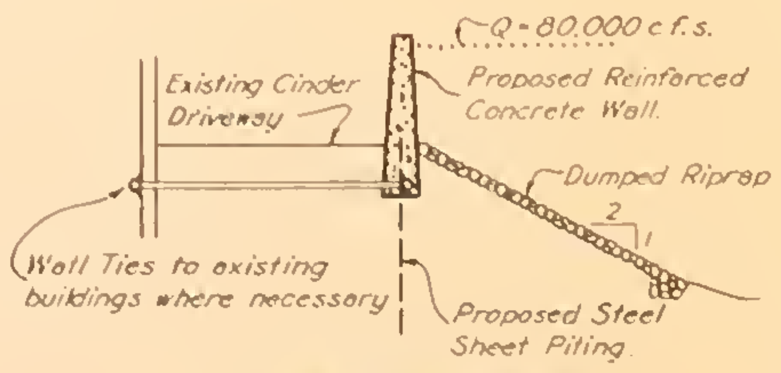
10 0 10 20 FEET


Stop Log Slot
Q=80,000 c.f.s.
Proposed Reinforced Concrete Wall
Ground Surface

SECTION E–E

SCALE

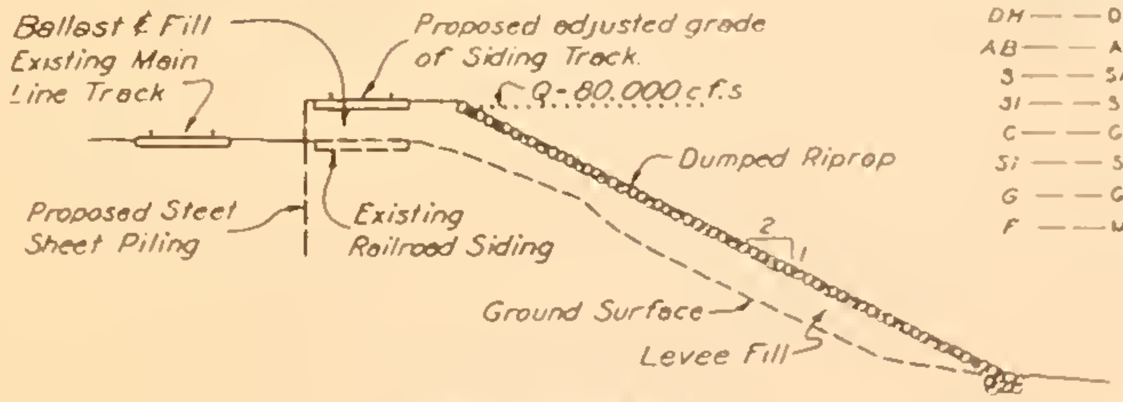
10 0 10 20 FEET


Q=80,000 c.f.s.
Existing Cinder Driveway
Proposed Reinforced Concrete Wall.
Dumped Riprap
2
1
Wall Ties to existing buildings where necessary
Proposed Steel Sheet Piling

SECTION B–B

SCALE

10 0 10 20 FEET


Ballast & Fill
Existing Main Line Track
Proposed adjusted grade of Siding Track
Q=80,000 c.f.s.
Dumped Riprap
2
1
Proposed Steel Sheet Piling
Existing Railroad Siding
Ground Surface
Levee Fill

SECTION A–A

SCALE

10 0 10 20 FEET

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

LOCAL IMPROVEMENT PROJECT

BINGHAMTON, N.Y.

SCALES AS SHOWN

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. MAY 20, 1936

J. L. Nathan — SENIOR ENGINEER

PRINCIPAL ENGINEER

MAJOR, CORPS OF ENGINEERS U.S. ARMY, DISTRICT ENGINEER

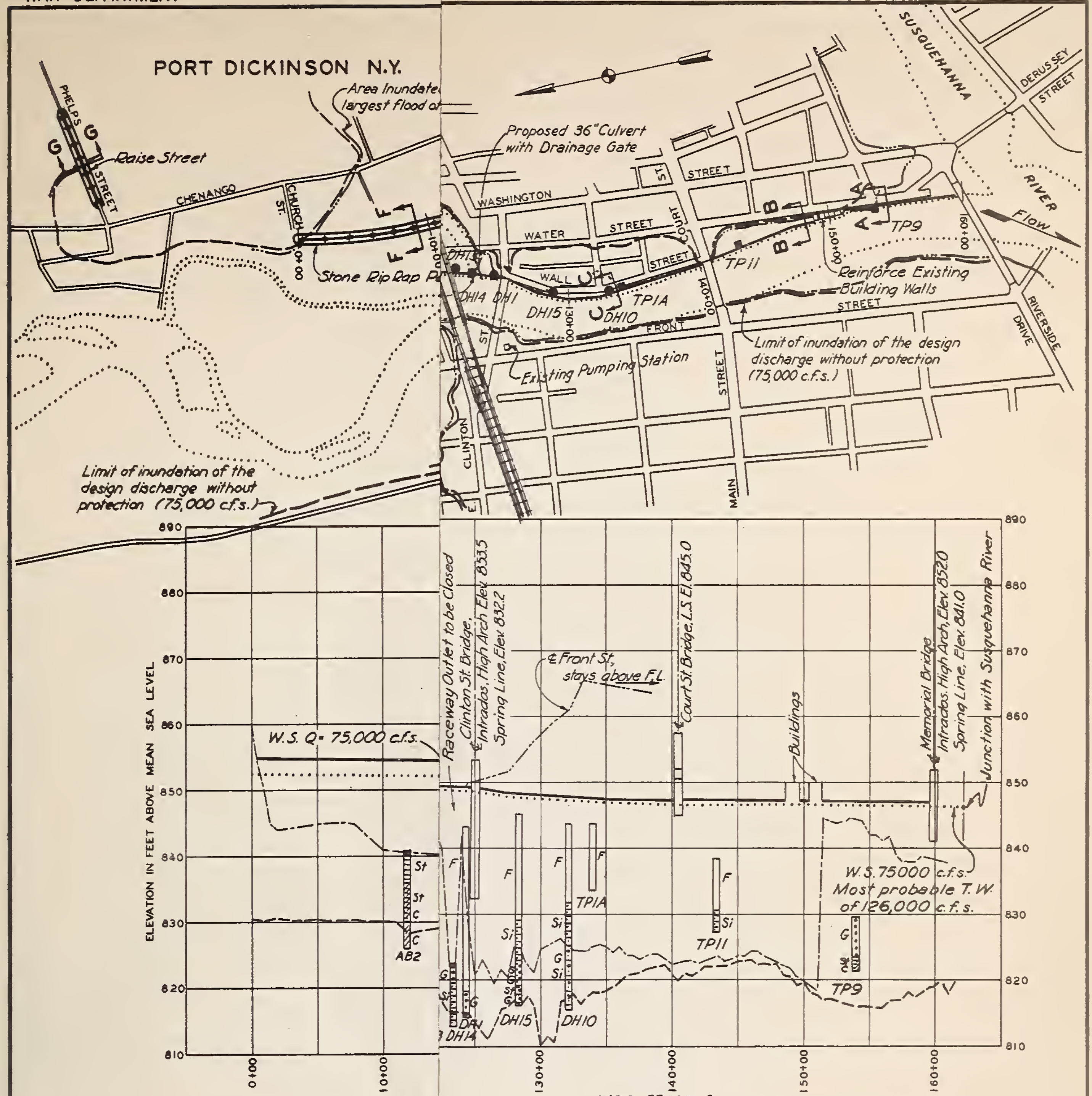
DRAWN BY F.A.D.
TRACED BY P.E.G.
CHECKED BY A.L.

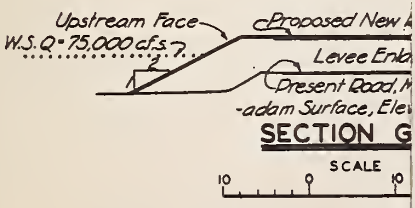
FILE NO. 6403-1

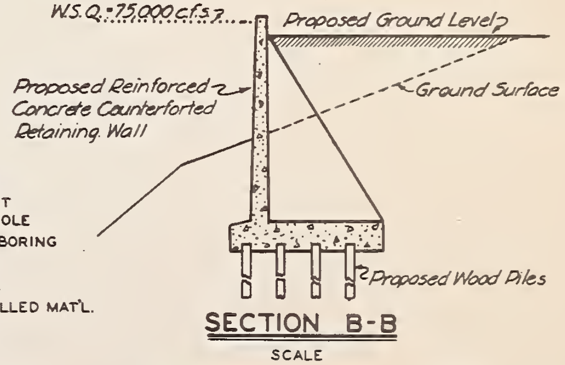
PLATE 2

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY

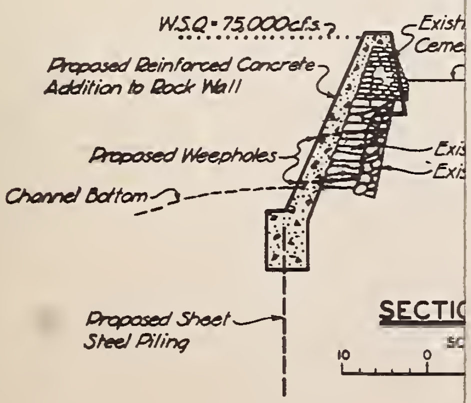

PORT DICKINSON N.Y.
Area Inundate
largest flood o
PHELPS STREET
G G
Raise Street
CHENANGO
CHURCH ST.
F F
00+0
10+00
Stone Rip Rap P
Limit of inundation of the design discharge without protection (75,000 c.f.s.)
SUSQUEHANNA
DERUSSEY STREET
RIVER
Flow
Proposed 36" Culvert with Drainage Gate
WASHINGTON
WATER
STREET
ST.
COURT
WALL
STREET
FRONT
B B
A A
TP9
TP11
150+00
160+09
140+00
130+00
DH13
DH14
DH1
DH15
C C
DH10
TP1A
Reinforce Existing Building Walls
STREET
RIVERSIDE DRIVE
Limit of inundation of the design discharge without protection (75,000 c.f.s.)
Existing Pumping Station
CLINTON
STREET
MAIN
E.
ELEVATION IN FEET ABOVE MEAN SEA LEVEL
890
880
870
860
850
840
830
820
810
W.S. Q = 75,000 c.f.s.
Raceway Outlet to be Closed
Clinton St. Bridge, Intrados, High Arch Elev. 833.5, Spring Line, Elev. 832.2
℄ Front St, stays above F.L.
Court St. Bridge, L.S. El. 845.0
Buildings
Memorial Bridge, Intrados, High Arch, Elev. 852.0, Spring Line, Elev. 841.0
Junction with Susquehanna River
W.S. 75000 c.f.s. Most probable T.W. of 126,000 c.f.s.
St
St
C
C
AB2
F
G
Si
DH14
DH1
DH15
DH10
TP1A
TP11
TP9
G
0+00
10+00
130+00
140+00
150+00
160+00


Upstream Face
W.S.Q = 75,000 c.f.s.
Proposed New
Levee Emb
Present Road, M-adam Surface, Ele
SECTION G
SCALE
10
0
10


W.S.Q. = 75,000 c.f.s.
Proposed Ground Level
Ground Surface
Proposed Reinforced Concrete Counterforted Retaining Wall
Proposed Wood Piles
SECTION B-B
SCALE
10
0
10
20 FEET

LEGEND

T.P. —— TEST PIT
D.H. —— DRILL HOLE
A.B. —— AUGER BORING
C. —— CLAY
G. —— GRAVEL
F. —— MISC. FILLED MAT'L.
S —— SAND
St —— SILT
Si —— SAND & SILT


W.S.Q = 75,000 c.f.s.
Exist
Ceme
Proposed Reinforced Concrete Addition to Rock Wall
Proposed Weepholes
Exis
Exis
Channel Bottom
Proposed Sheet Steel Piling
SECTI
SC
10
0

RE IN FEET AND REFER TO
A LEVEL AT SANDY HOOK N.J.

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

LOCAL IMPROVEMENT PROJECT

BINGHAMTON, N.Y.

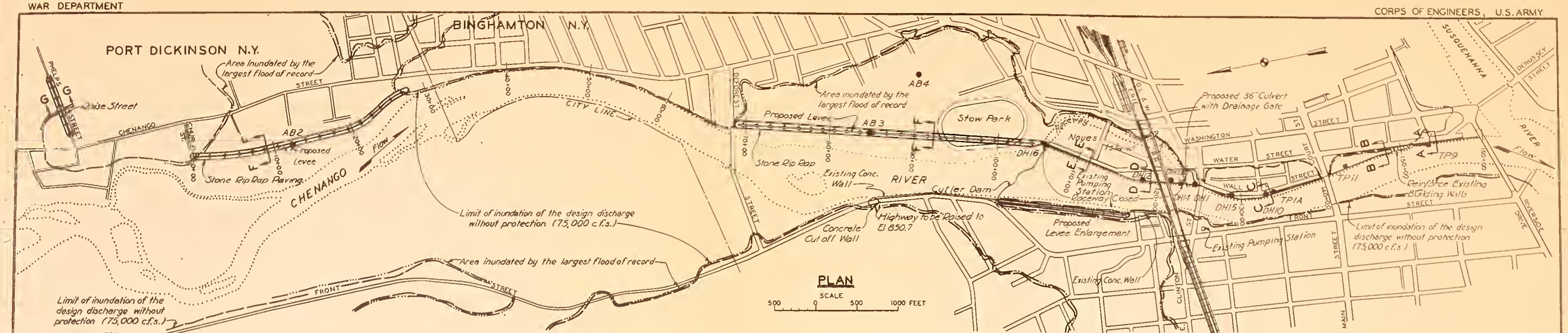
SCALES: AS SHOWN

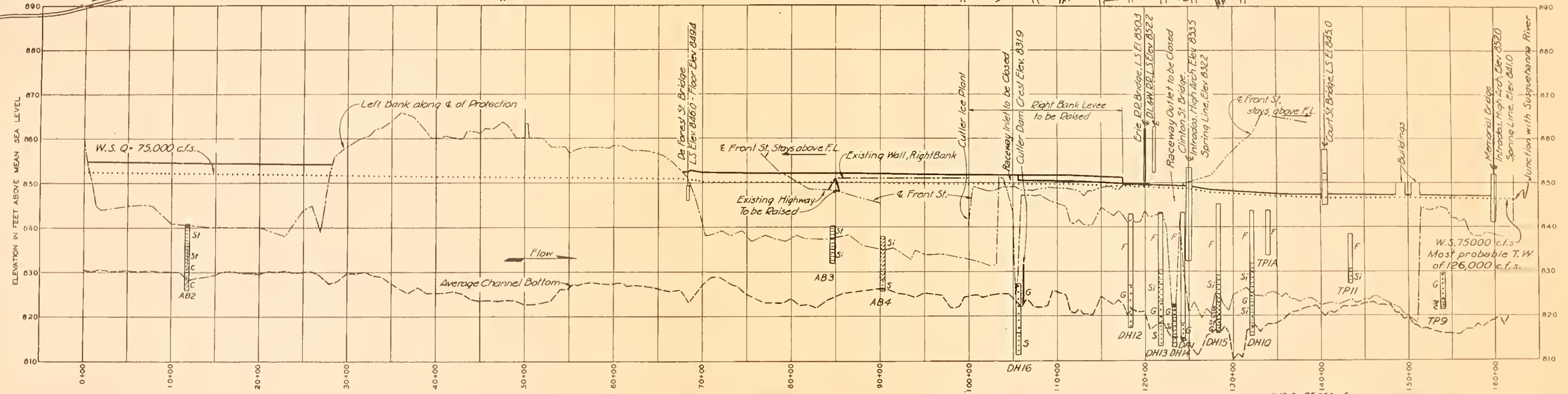
U.S. ENGINEER OFFICE BINGHAMTON DISTRICT BINGHAMTON, N.Y. MAY 20, 1939

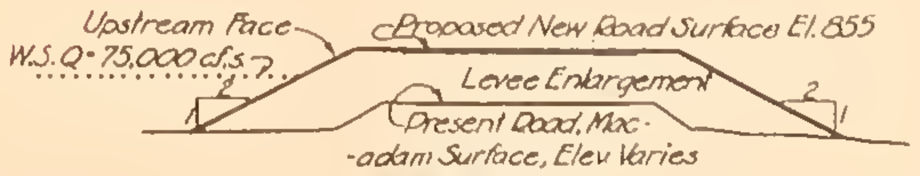
SUBMITTED:	RECOMMENDED:	APPROVED:
J. L. Nathan	H. P. Fifer	G. Wold
SENIOR ENGINEER	PRINCIPAL ENGINEER	MAJOR, CORPS OF ENGINEERS, U.S. ARMY, DISTRICT ENGINEER

DRAWN BY: F.A.D.
TRACED BY: O.S.
CHECKED BY: A.L.

FILE NO. 6403-2

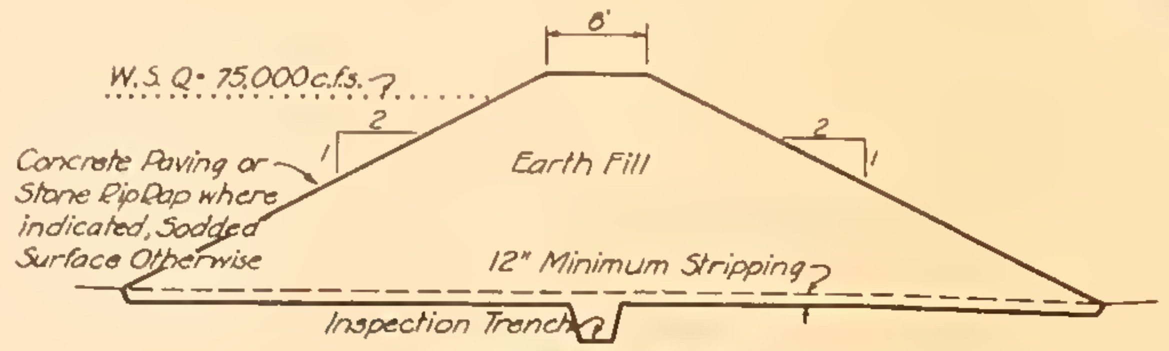

PORT DICKINSON N.Y.
BINGHAMTON N.Y.
Area Inundated by the largest flood of record
PHELPS STREET
Rose Street
CHENANGO STREET
STREET
G G
AB2
Proposed Levee
Stone Rip Rap Paving
F F
CHENANGO
Flow
CITY LINE
Limit of inundation of the design discharge without protection (75,000 c.f.s.)
Area inundated by the largest flood of record
FRONT STREET
Limit of inundation of the design discharge without protection (75,000 c.f.s.)
DEFOREST ST.
AB4
Area inundated by the largest flood of record
Proposed Levee
AB3
Stow Park
Stone Rip Rap
Existing Conc. Wall
RIVER
Cutler Dam
DH16
Noyes Island
Existing Pumping Station
Raceway Closed
Highway to be Raised to El 850.7
Concrete Cut off Wall
Proposed Levee Enlargement
E E
D D
DH12 DH13 DH14
DH15 DH10
TP1A
C C
TP11
B B
A A
TP9
Proposed 36" Culvert with Drainage Gate
WASHINGTON
WATER STREET
WALL
STREET
FRONT STREET
COURT ST.
SUSQUEHANNA
RIVER
Flow
Reinforce Existing Building Walls
Limit of inundation of the design discharge without protection (75,000 c.f.s.)
Existing Pumping Station
Existing Conc. Wall
CLINTON ST.
MAIN STREET
DEPOT
DEHUSSY ST.
SUSQUEHANNA STREET
ERIE
D.L.&W.
PLAN
SCALE
500 0 500 1000 FEET




Upstream Face
Proposed New Road Surface El. 855
W.S. Q = 75,000 c.f.s.
Levee Enlargement
Present Road, Mac-adam Surface, Elev. Varies
2
1

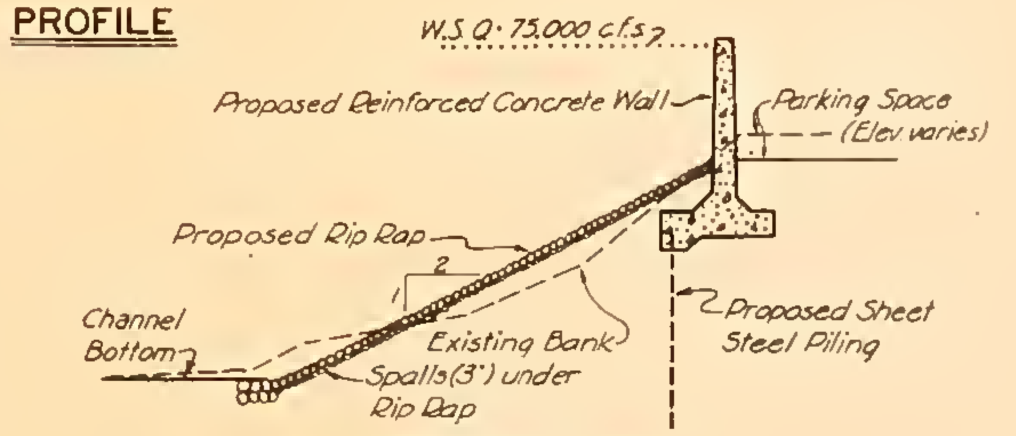
SECTION G-G

SCALE
10 0 10 20 FEET


W.S. Q = 75,000 c.f.s.
8'
Earth Fill
Concrete Paving or Stone Rip Rap where indicated, Sodded Surface Otherwise
12" Minimum Stripping
Inspection Trench
1
2
2
1

SECTION F-F

SCALE
10 0 10 20 FEET

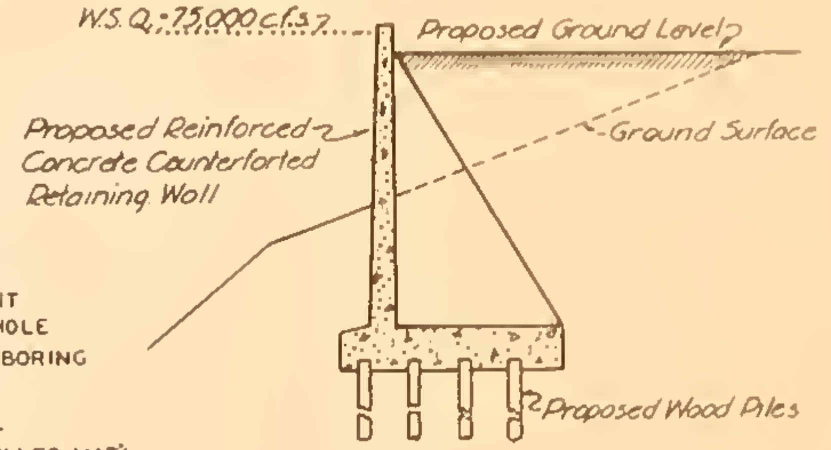

W.S. Q = 75,000 c.f.s.
Proposed Reinforced Concrete Wall
Parking Space (Elev. varies)
Proposed Rip Rap
2
1
Channel Bottom
Existing Bank
Spalls (3") under Rip Rap
Proposed Sheet Steel Piling

SECTION D-D

SCALE
10 0 10 20 FEET

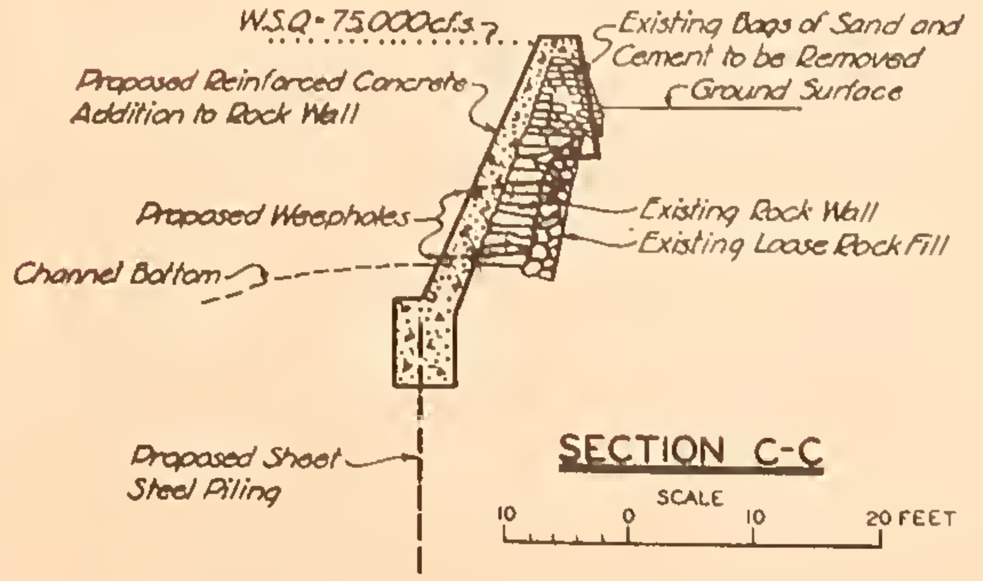
LEGEND

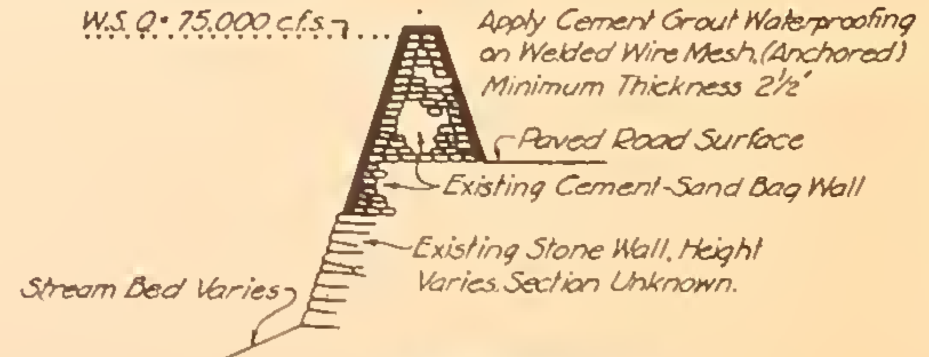
T.P.	TEST PIT
D.H.	DRILL HOLE
A.B.	AUGER BORING
C.	CLAY
G	GRAVEL
F	MISC. FILLED MAT'L.
S	SAND
St	SILT
Si	SAND & SILT


W.S. Q = 75,000 c.f.s.
Proposed Ground Level
Proposed Reinforced Concrete Counterforted Retaining Wall
Ground Surface
Proposed Wood Piles

SECTION B-B

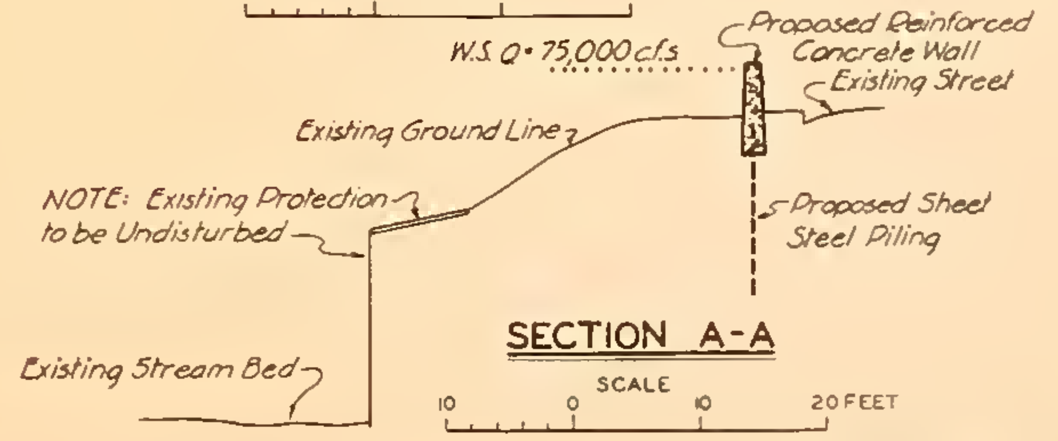
SCALE
10 0 10 20 FEET


W.S. Q = 75,000 c.f.s.
Existing Bags of Sand and Cement to be Removed
Proposed Reinforced Concrete Addition to Rock Wall
Ground Surface
Proposed Weepholes
Existing Rock Wall
Existing Loose Rock Fill
Channel Bottom
Proposed Sheet Steel Piling
SECTION C-C
SCALE
10 0 10 20 FEET


W.S. Q = 75,000 c.f.s.
Apply Cement Grout Waterproofing on Welded Wire Mesh (Anchored) Minimum Thickness 2½"
Paved Road Surface
Existing Cement-Sand Bag Wall
Existing Stone Wall, Height Varies. Section Unknown.
Stream Bed Varies

SECTION E-E

SCALE
10 0 10 20 FEET


W.S. Q = 75,000 c.f.s.
Proposed Reinforced Concrete Wall
Existing Street
Existing Ground Line
NOTE: Existing Protection to be Undisturbed
Proposed Sheet Steel Piling
Existing Stream Bed
SECTION A-A
SCALE
10 0 10 20 FEET

NOTE. ELEVATIONS ARE IN FEET AND REFER TO THE PLANE OF MEAN SEA LEVEL AT SANDY HOOK N.J.

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

LOCAL IMPROVEMENT PROJECT

BINGHAMTON, N.Y.

SCALES: AS SHOWN

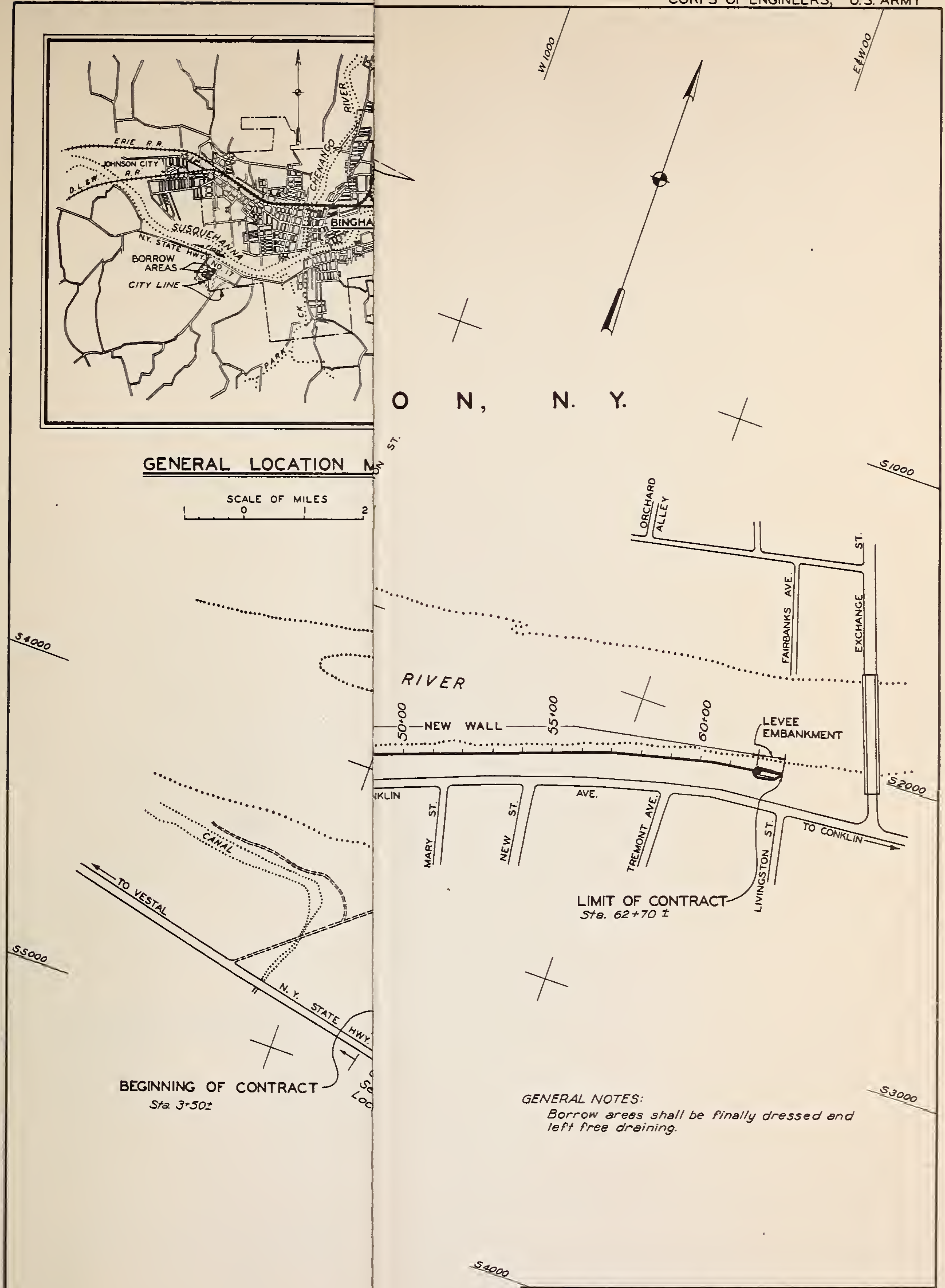
U.S. ENGINEER OFFICE BINGHAMTON DISTRICT BINGHAMTON, N.Y. MAY 20, 1939

SUBMITTED: J. L. Nathan SENIOR ENGINEER
RECOMMENDED: D. P. Pifer PRINCIPAL ENGINEER
APPROVED: G. J. Nold MAJOR, CORPS OF ENGINEERS, U.S. ARMY, DISTRICT ENGINEER

DRAWN BY: F.A.O.
TRACED BY: O.S.
CHECKED BY: A.L.

FILE NO 6403-2

PLATE 3


ERIE R.R.
JOHNSON CITY
D.L.&W. R.R.
SUSQUEHANNA
N.Y. STATE HWY. NO. 17
BORROW AREAS
CITY LINE
CHENANGO RIVER
BINGHA
PARK
GENERAL LOCATION M
SCALE OF MILES
1 0 1 2
O N, N. Y.
W1000
E&W00
S1000
S2000
S3000
S4000
S5000
W5000
ORCHARD ALLEY
FAIRBANKS AVE.
EXCHANGE ST.
RIVER
50+00
NEW WALL
55+00
60+00
LEVEE EMBANKMENT
NKLIN AVE.
MARY ST.
NEW ST.
TREMONT AVE.
LIVINGSTON ST.
TO CONKLIN
LIMIT OF CONTRACT
Sta. 62+70 ±
CANAL
TO VESTAL
N. Y. STATE HWY.
BEGINNING OF CONTRACT
Sta. 3+50±

GENERAL NOTES:
Borrow areas shall be finally dressed and left free draining.

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

SUSQUEHANNA RIVER FLOOD PROTECTION
BINGHAMTON SECTION NO. 1
BINGHAMTON, NEW YORK

GENERAL PLAN

SCALES: AS SHOWN

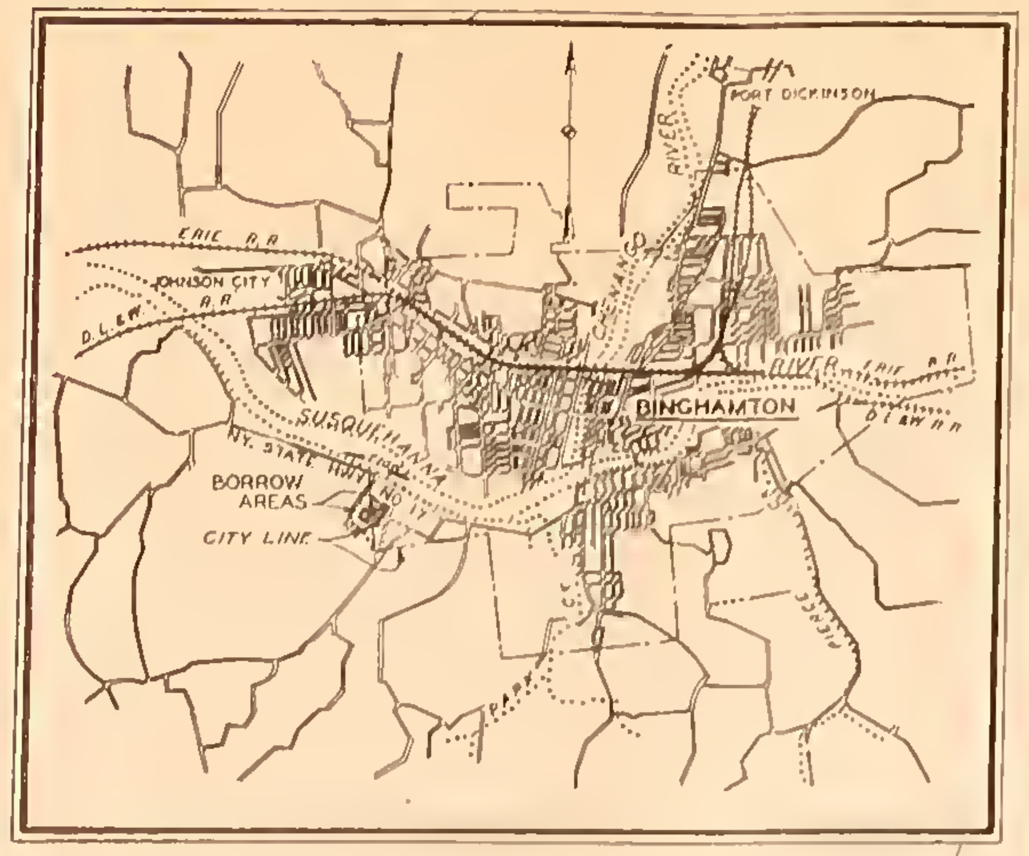
U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. NOV. 2, 1939

SUBMITTED: SENIOR ENGINEER
RECOMMENDED: PRINCIPAL ENGINEER
APPROVED: MAJOR CORPS OF ENGINEERS DISTRICT ENGINEER

DESIGN SECTION
SENIOR ENGINEER

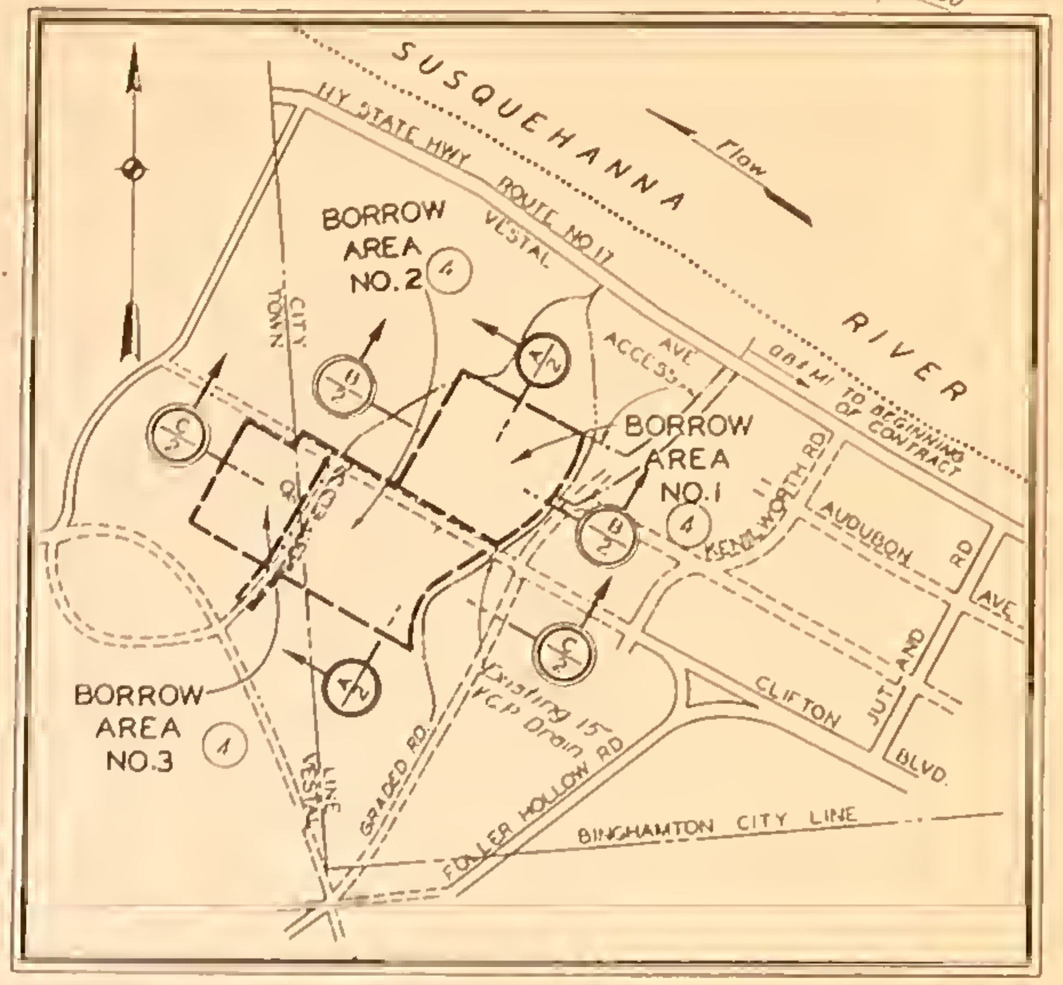
DRAWN BY: V.B.
TRACED BY: V.B. & R.G.
CHECKED BY: A.L.

FILE NO. 6402-10


PORT DICKINSON
ERIE R.R.
JOHNSON CITY
D.L.&W.
RIVER
BINGHAMTON
SUSQUEHANNA
N.Y. STATE
BORROW AREAS
CITY LINE
D.L.&W. R.R.

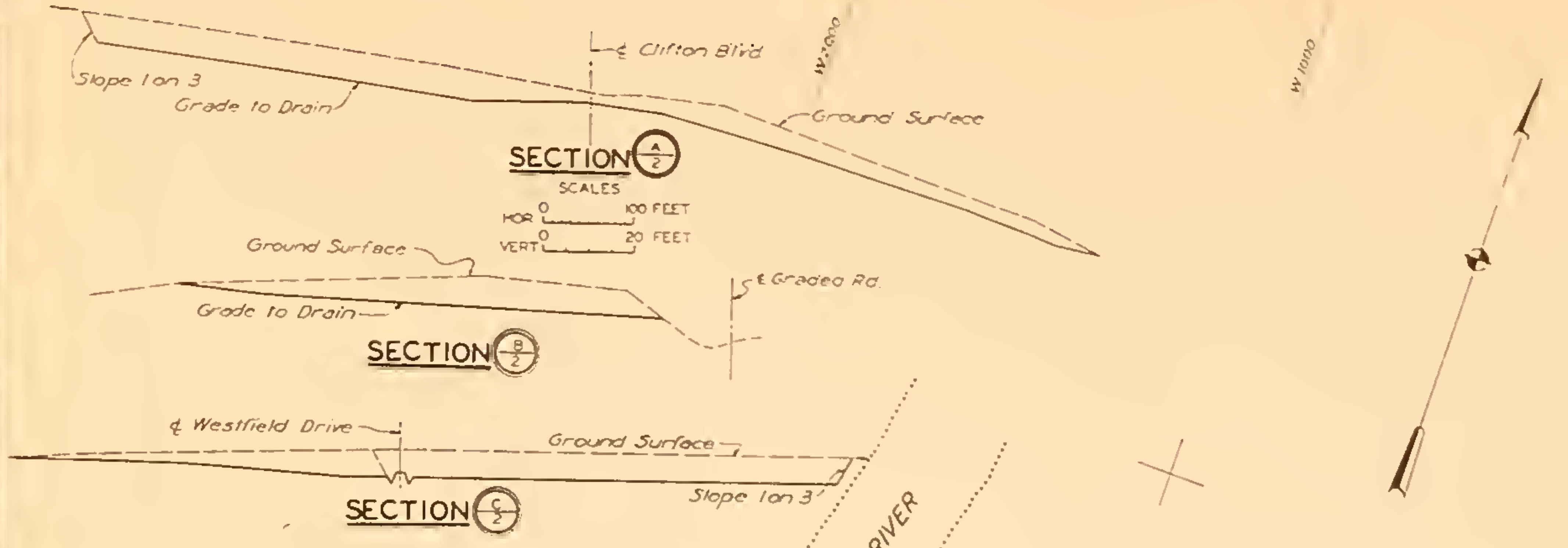
GENERAL LOCATION MAP

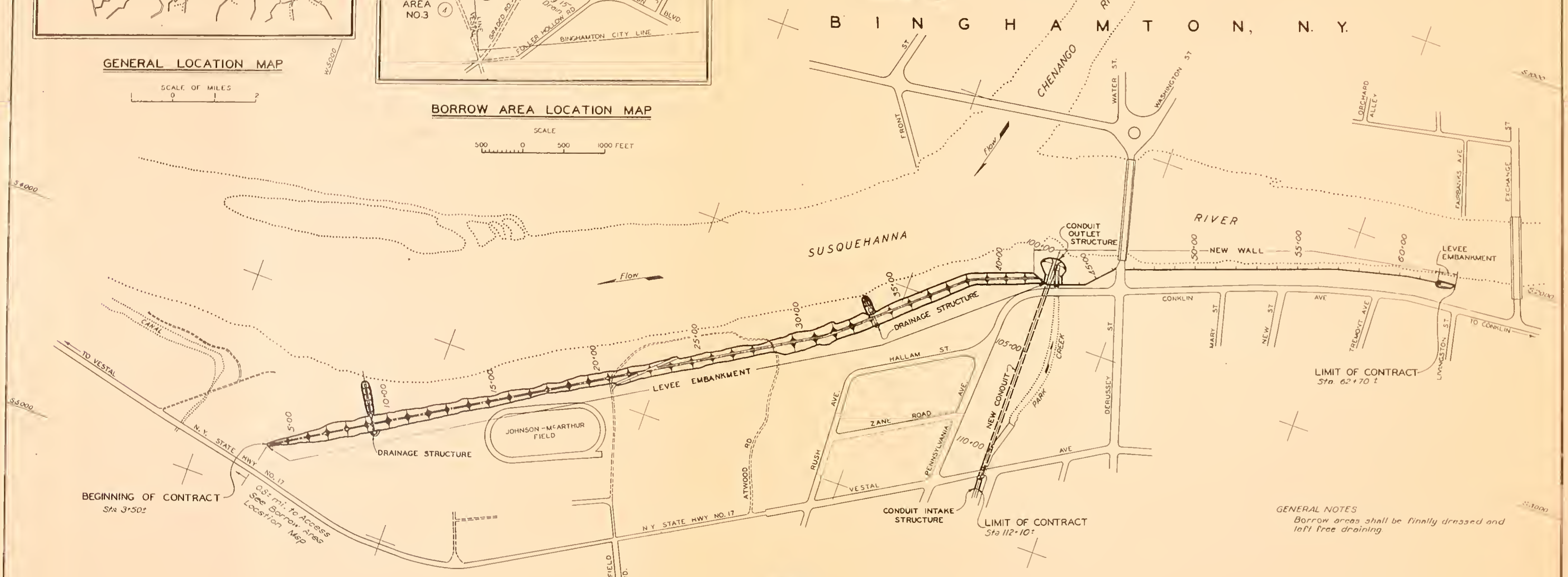
SCALE OF MILES
0 1 2


SUSQUEHANNA
RIVER
Flow
N.Y. STATE HWY ROUTE NO. 17
VESTAL
ACCESS
AVE
BORROW AREA NO. 2
BORROW AREA NO. 1
BORROW AREA NO. 3
KENILWORTH RD
AUDUBON
RD
AVE
JUTLAND
CLIFTON
BLVD.
Existing 15" V.C.P. Drain
GRADED RD
FULLER HOLLOW RD
BINGHAMTON CITY LINE
TOWN
CITY
LINE

BORROW AREA LOCATION MAP

SCALE
500 0 500 1000 FEET


Slope 1 on 3
Grade to Drain
℄ Clifton Blvd
Ground Surface
SECTION A
SCALES
HOR 0 100 FEET
VERT 0 20 FEET
Ground Surface
Grade to Drain
℄ Graded Rd.
SECTION B
℄ Westfield Drive
Ground Surface
Slope 1 on 3
SECTION C
W 2000
W 1000
E 1000


B I N G H A M T O N, N. Y.
CHENANGO
RIVER
Flow
ST.
FRONT
WATER ST.
WASHINGTON ST.
ORCHARD ALLEY
FAIRBANKS AVE
EXCHANGE ST
SUSQUEHANNA
RIVER
Flow
CANAL
TO VESTAL
CONDUIT OUTLET STRUCTURE
NEW WALL
LEVEE EMBANKMENT
DRAINAGE STRUCTURE
LEVEE EMBANKMENT
DRAINAGE STRUCTURE
5+00
10+00
15+00
20+00
25+00
30+00
35+00
40+00
45+00
50+00
55+00
60+00
100+00
105+00
110+00
CONKLIN
AVE
MARY ST
NEW ST
TREMONT AVE
LIVINGSTON ST
TO CONKLIN
LIMIT OF CONTRACT
Sta 62+70 ±
HALLAM ST
ZANE ROAD
AVE
RUSH AVE
PENNSYLVANIA AVE
NEW CONDUIT
PARK CREEK
DERUSSEY ST
VESTAL AVE
JOHNSON-McARTHUR FIELD
ATWOOD RD
N.Y. STATE HWY NO. 17
N.Y. STATE HWY NO. 17
BROOKFIELD RD.
BEGINNING OF CONTRACT
Sta 3+50±
0.5± mi. to Access See Borrow Area Location Map
CONDUIT INTAKE STRUCTURE
LIMIT OF CONTRACT
Sta 112+10±
S 3000
S 4000
S 5000

GENERAL NOTES
Borrow areas shall be finally dressed and left free draining

PLAN

SCALE
200 0 200 400 FEET

SOUTHERN NEW YORK FLOOD CONTROL PROJECT
SUSQUEHANNA RIVER FLOOD PROTECTION
BINGHAMTON SECTION NO. I
BINGHAMTON, NEW YORK

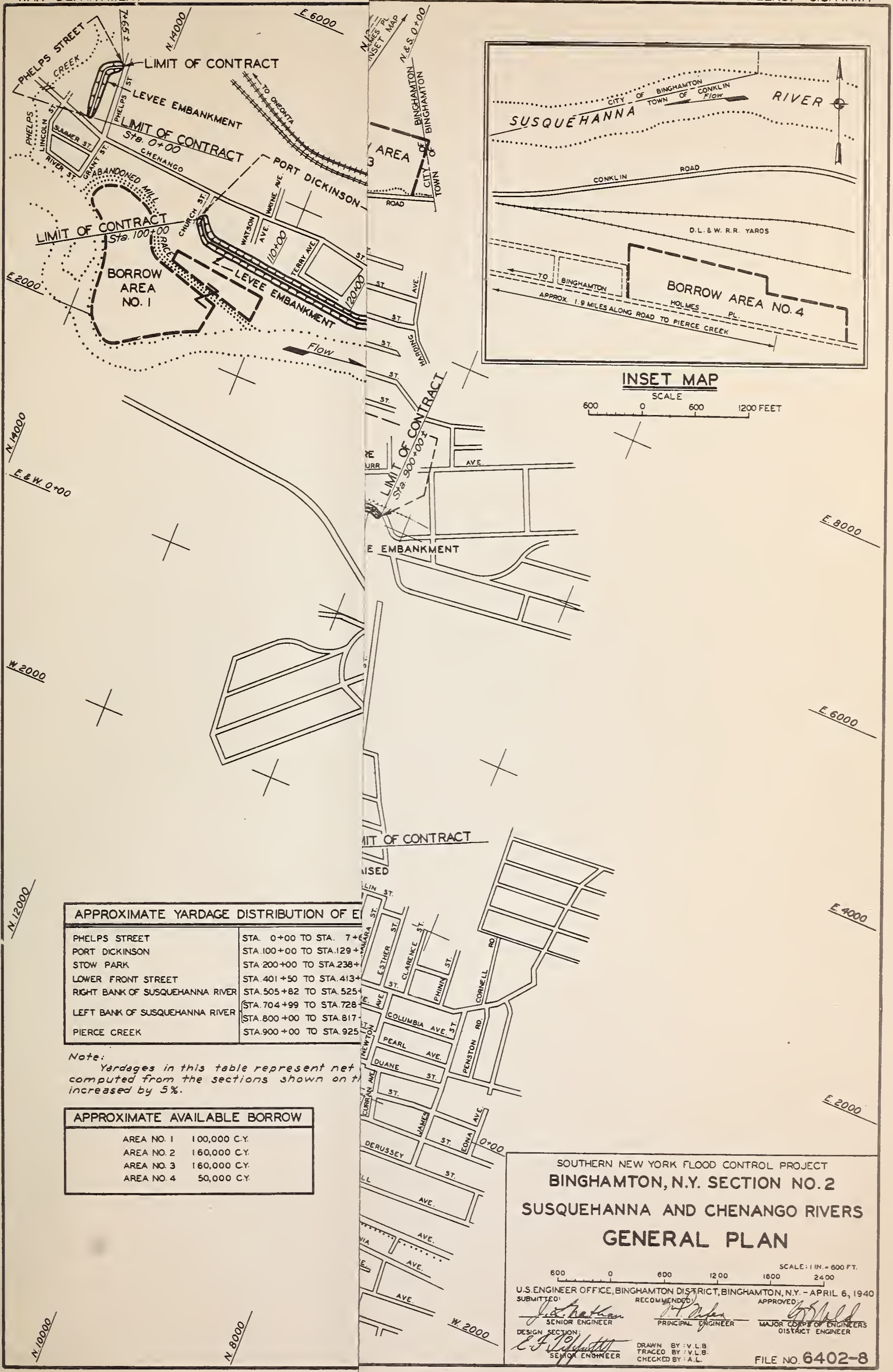
GENERAL PLAN

SCALES AS SHOWN

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. NOV 2, 1939
SUBMITTED RECOMMENDED APPROVED
SENIOR ENGINEER PRINCIPAL ENGINEER MAJOR, CORPS OF ENGINEERS DISTRICT ENGINEER
DESIGN SECTION
L. F. Pfeffer
SENIOR ENGINEER
DRAWN BY V.B.
TRACED BY V.B.&P.S.
CHECKED BY A.L.
FILE NO 6402-10

WAR DEPARTMENT

CORPS OF ENGINEERS. U.S. ARMY


PHELPS STREET
CREEK
LIMIT OF CONTRACT
LEVEE EMBANKMENT
LIMIT OF CONTRACT
Sta. 0+00
CHENANGO
PHELPS ST
LINCOLN ST.
SUMMER ST.
RIVER ST.
GRANT ST.
ABANDONED MILL
RACE
LIMIT OF CONTRACT
Sta. 100+00
CHURCH ST.
BORROW AREA NO. 1
WATSON AVE.
WAYNE AVE.
TERRY AVE.
110+00
120+00
LEVEE EMBANKMENT
PORT DICKINSON
TO ONEONTA
AREA 3
ROAD
CITY OF BINGHAMTON
TOWN OF BINGHAMTON
N. & S. 0+00
SEE INSET MAP
Flow
HARDING AVE.
LIMIT OF CONTRACT
Sta. 900+00±
E EMBANKMENT
AVE.
IMIT OF CONTRACT
ISED
LIN ST.
ESTHER ST.
CLARENCE ST.
PHINN ST.
CORNELL RD
COLUMBIA AVE.
PEARL AVE.
DUANE ST.
NEWTON
CURRAN AVE
JAMES ST.
EONA AVE.
PENSTON RD.
DERUSSEY ST.
AVE.
0+00
N. 14000
N. 12000
N. 10000
N. 8000
E. 6000
E. 8000
E. 6000
E. 4000
E. 2000
E. 2000
E. & W. 0+00
W. 2000
W. 2000
SUSQUEHANNA RIVER
CITY OF BINGHAMTON
TOWN OF CONKLIN
Flow
CONKLIN ROAD
D.L. & W. R.R. YARDS
TO BINGHAMTON
BORROW AREA NO. 4
HOLMES PL.
APPROX. 1.9 MILES ALONG ROAD TO PIERCE CREEK
INSET MAP
SCALE
600
0
600
1200 FEET

APPROXIMATE YARDAGE DISTRIBUTION OF E	
PHELPS STREET	STA. 0+00 TO STA. 7+6
PORT DICKINSON	STA. 100+00 TO STA. 129+
STOW PARK	STA. 200+00 TO STA. 238+
LOWER FRONT STREET	STA. 401+50 TO STA. 413+
RIGHT BANK OF SUSQUEHANNA RIVER	STA. 505+82 TO STA. 525
LEFT BANK OF SUSQUEHANNA RIVER	STA. 704+99 TO STA. 728 STA. 800+00 TO STA. 817
PIERCE CREEK	STA. 900+00 TO STA. 925

Note:

Yardages in this table represent net
computed from the sections shown on t
increased by 5%.

APPROXIMATE AVAILABLE BORROW	
AREA NO. 1	100,000 C.Y.
AREA NO. 2	160,000 C.Y.
AREA NO. 3	160,000 C.Y.
AREA NO. 4	50,000 C.Y.

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

BINGHAMTON, N.Y. SECTION NO. 2

SUSQUEHANNA AND CHENANGO RIVERS

GENERAL PLAN

SCALE: 1 IN. = 600 FT.
600 0 600 1200 1800 2400

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. - APRIL 6, 1940

SUBMITTED:
SENIOR ENGINEER

RECOMMENDED:
PRINCIPAL ENGINEER

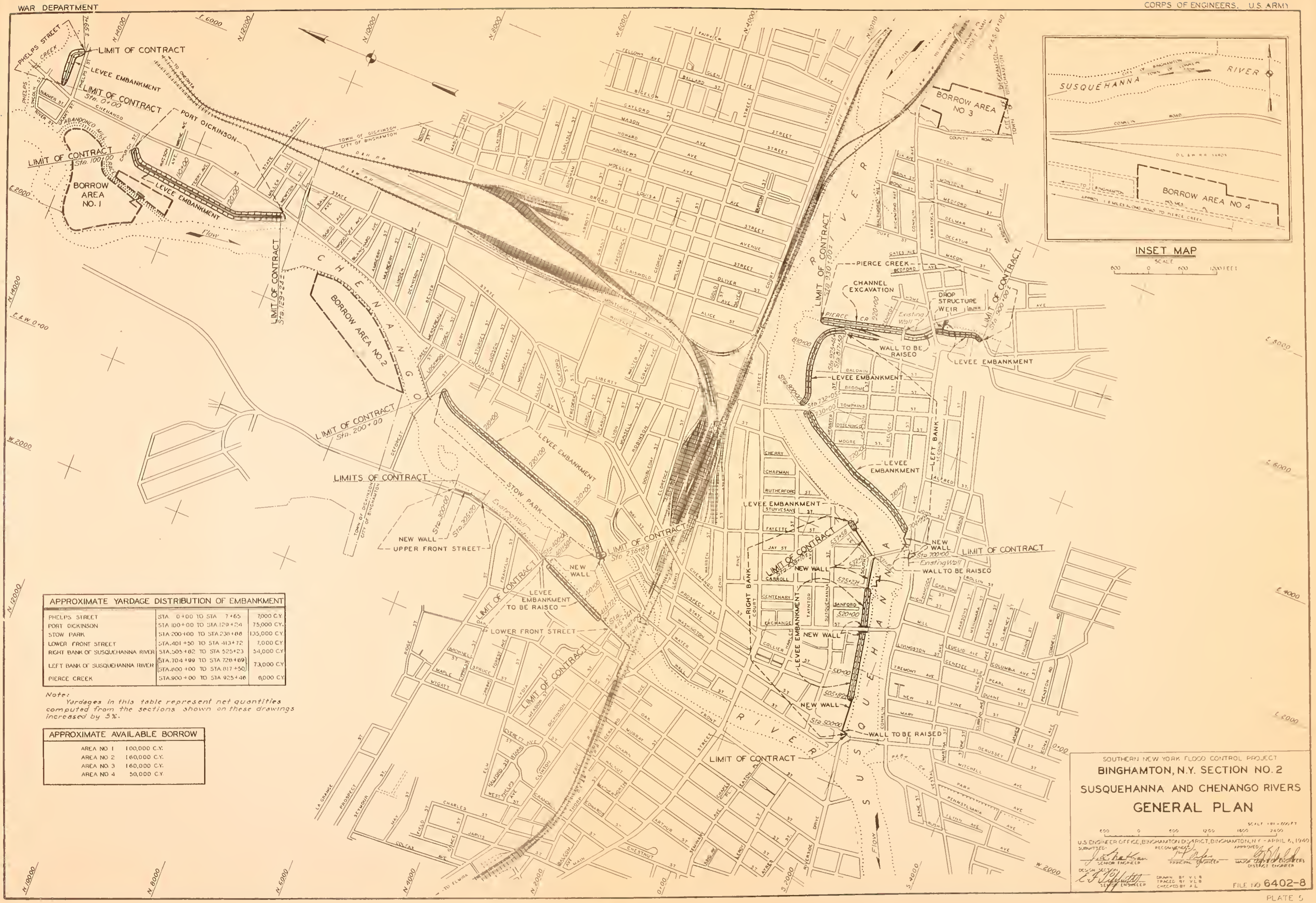
APPROVED:
MAJOR CORPS OF ENGINEERS
DISTRICT ENGINEER

DESIGN SECTION:
SENIOR ENGINEER

DRAWN BY: V.L.B.
TRACED BY: V.L.B.
CHECKED BY: A.L.

FILE NO. 6402-8

PLATE 5


LIMIT OF CONTRACT
PHELPS STREET
LEVEE EMBANKMENT
Sta. 0+00
PORT DICKINSON
ABANDONED MILL RACE
Sta. 100+00
BORROW AREA NO. 1
Flow
Sta. 129+23
BORROW AREA NO. 2
CHENANGO
Sta. 200+00
LIMITS OF CONTRACT
STOW PARK
Sta. 236+88
NEW WALL
UPPER FRONT STREET
Sta. 300+00
Existing Wall
LEVEE EMBANKMENT TO BE RAISED
LOWER FRONT STREET
Sta. 415+44
TOWN OF DICKINSON
CITY OF BINGHAMTON
D & H R.R.
BORROW AREA NO. 3
PIERCE CREEK
CHANNEL EXCAVATION
DROP STRUCTURE WEIR
Existing Wall
WALL TO BE RAISED
Sta. 930+00
Sta. 900+02
LEVEE EMBANKMENT
Sta. 732+05
LEFT BANK
Sta. 700+00
RIGHT BANK
NEW WALL
Sta. 505+82
Sta. 500+00
WALL TO BE RAISED
SUSQUEHANNA
RIVER
Flow
INSET MAP
SUSQUEHANNA RIVER
BORROW AREA NO 4
SCALE
600 0 600 1200 FEET

APPROXIMATE YARDAGE DISTRIBUTION OF EMBANKMENT		
PHELPS STREET	STA. 0+00 TO STA 7+65	7,000 C.Y.
PORT DICKINSON	STA 100+00 TO STA 129+24	75,000 C.Y.
STOW PARK	STA 200+00 TO STA 230+08	135,000 C.Y.
LOWER FRONT STREET	STA. 401+50 TO STA 413+72	7,000 C.Y.
RIGHT BANK OF SUSQUEHANNA RIVER	STA. 505+82 TO STA 525+23	54,000 C.Y.
LEFT BANK OF SUSQUEHANNA RIVER	STA. 704+99 TO STA 720+89 STA. 800+00 TO STA. 817+50	73,000 C.Y.
PIERCE CREEK	STA. 900+00 TO STA 925+46	8,000 C.Y.

Note:
Yardages in this table represent net quantities computed from the sections shown on these drawings increased by 5%.

APPROXIMATE AVAILABLE BORROW	
AREA NO 1	100,000 C.Y.
AREA NO 2	160,000 C.Y.
AREA NO 3	160,000 C.Y.
AREA NO 4	50,000 C.Y.

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

BINGHAMTON, N.Y. SECTION NO. 2

SUSQUEHANNA AND CHENANGO RIVERS

GENERAL PLAN

600 0 600 1200 1800 2400

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. – APRIL 6, 1940

SUBMITTED: SENIOR ENGINEER
RECOMMENDED: PRINCIPAL ENGINEER
APPROVED: DISTRICT ENGINEER

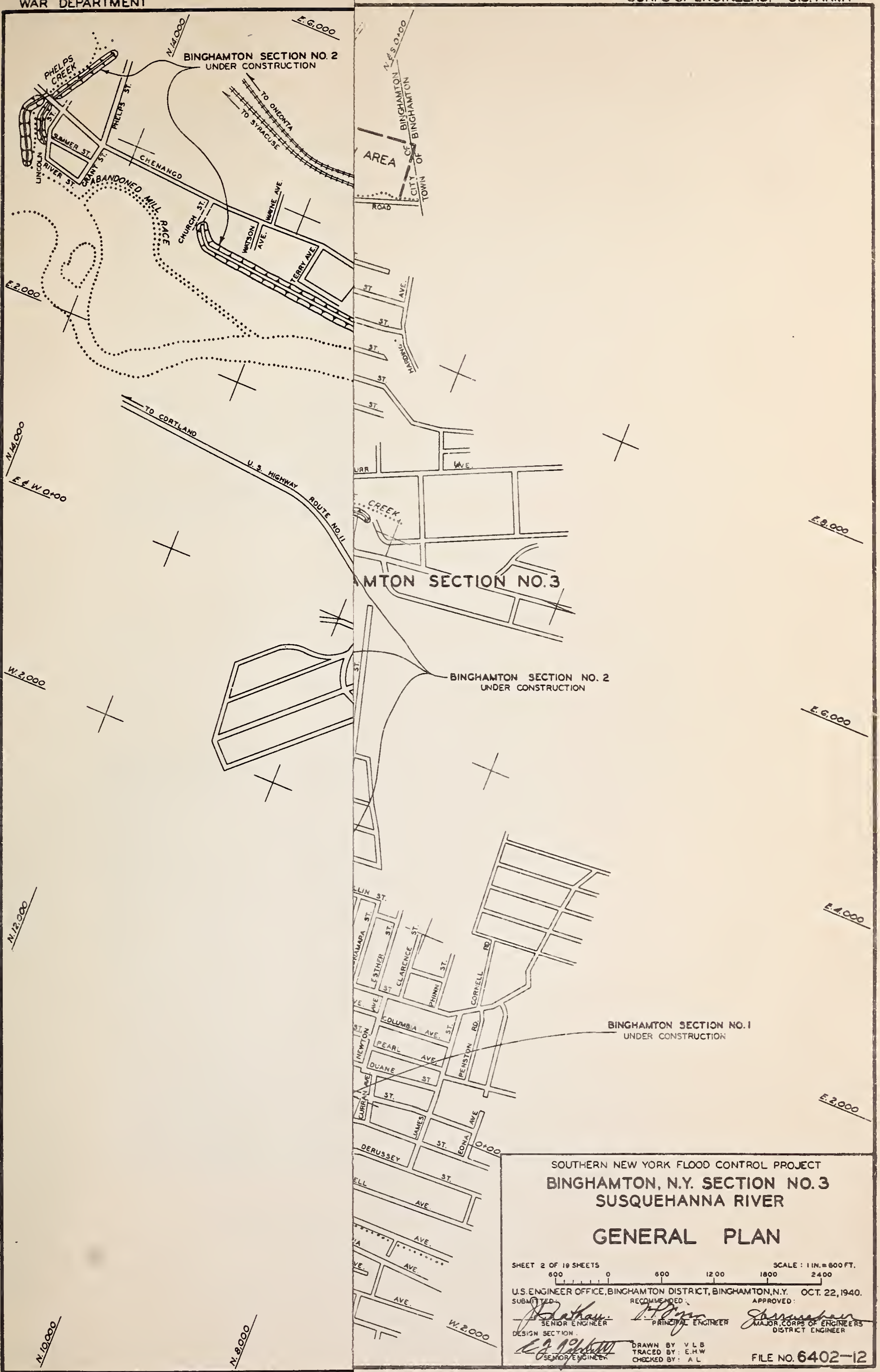
DESIGN SECTION: E. F. [illegible] SENIOR ENGINEER

DRAWN BY V.L.B.
TRACED BY V.L.B.
CHECKED BY A.L.

FILE NO 6402-8

WAR DEPARTMENT

CORPS OF ENGINEERS. U.S. ARMY


BINGHAMTON SECTION NO. 2
UNDER CONSTRUCTION
PHELPS CREEK
PHELPS ST.
LINCOLN ST.
SUMMER ST.
RIVER ST.
GRANT ST.
CHENANGO
ABANDONED MILL RACE
CHURCH ST.
WATSON AVE.
WAYNE AVE.
TERRY AVE.
TO ONEONTA
TO SYRACUSE
AREA
ROAD
CITY OF BINGHAMTON
TOWN OF BINGHAMTON
N.& S. 0+00
HARDING
TO CORTLAND
U.S. HIGHWAY ROUTE NO. 11
CREEK
MTON SECTION NO. 3
BINGHAMTON SECTION NO. 2
UNDER CONSTRUCTION
BINGHAMTON SECTION NO. 1
UNDER CONSTRUCTION
RAMAPA ST.
ESTHER ST.
CLARENCE ST.
PHINN ST.
CORNELL RD.
COLUMBIA AVE.
NEWTON AVE.
PEARL AVE.
DUANE ST.
CURRAN AVE.
PENSTON RD.
JAMES ST.
EONA AVE.
DERUSSEY ST.
E.6.000
N.14.000
E.2.000
E.& W. 0+00
W.2.000
N.12.000
N.10.000
N.8.000
E.8.000
E.6.000
E.4.000
E.2.000
W.2.000
0+00

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

BINGHAMTON, N.Y. SECTION NO. 3
SUSQUEHANNA RIVER

GENERAL PLAN

SHEET 2 OF 19 SHEETS

SCALE: 1 IN. = 600 FT.

600 0 600 1200 1800 2400

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. OCT. 22, 1940.

SUBMITTED:	RECOMMENDED:	APPROVED:
SENIOR ENGINEER	PRINCIPAL ENGINEER	MAJOR, CORPS OF ENGINEERS DISTRICT ENGINEER

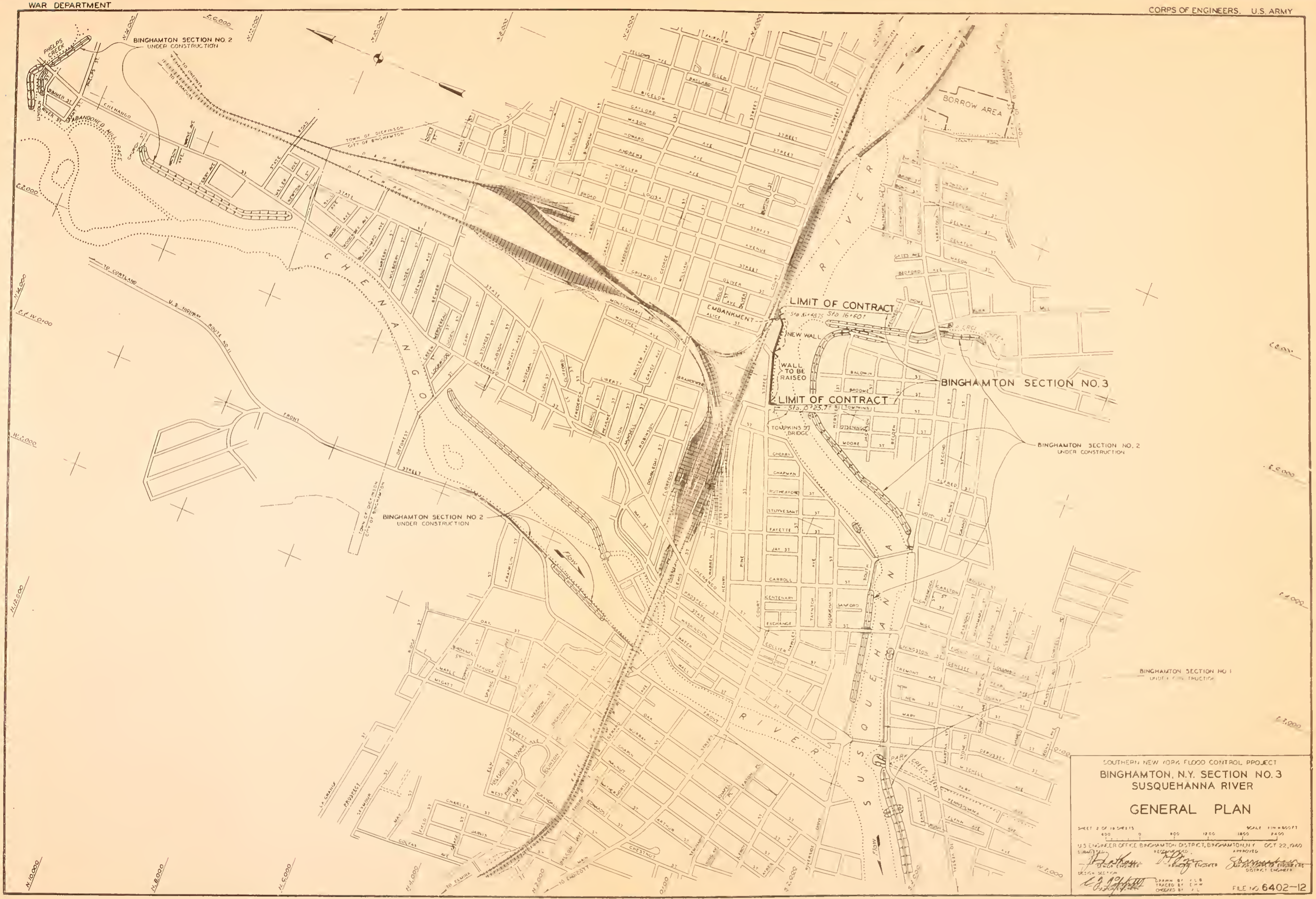
DESIGN SECTION.

SENIOR ENGINEER

DRAWN BY V.L.B.
TRACED BY: E.H.W.
CHECKED BY: A.L.

FILE NO. 6402-12

PLATE NO. 6


BINGHAMTON SECTION NO. 2 UNDER CONSTRUCTION
PHELPS CREEK
CHENANGO
ABANDONED MILL RACE
TOWN OF DICKINSON
CITY OF BINGHAMTON
TO CORTLAND
U.S. HIGHWAY ROUTE NO. 11
FRONT STREET
CHENANGO RIVER
FLOW
BORROW AREA
LIMIT OF CONTRACT
EMBANKMENT
NEW WALL
WALL TO BE RAISED
BINGHAMTON SECTION NO. 3
TOMPKINS ST BRIDGE
BINGHAMTON SECTION NO. 1 UNDER CONSTRUCTION
SUSQUEHANNA RIVER
PARK CREEK
TO ELMIRA
TO ENDICOTT
SCALE 1 IN = 800 FT
400 0 800 1200 1600 2400

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

BINGHAMTON, N.Y. SECTION NO. 3
SUSQUEHANNA RIVER

GENERAL PLAN

SHEET 2 OF 10 SHEETS

U.S. ENGINEER OFFICE BINGHAMTON DISTRICT, BINGHAMTON, N.Y. OCT 22, 1940

SUBMITTED
DESIGN ENGINEER

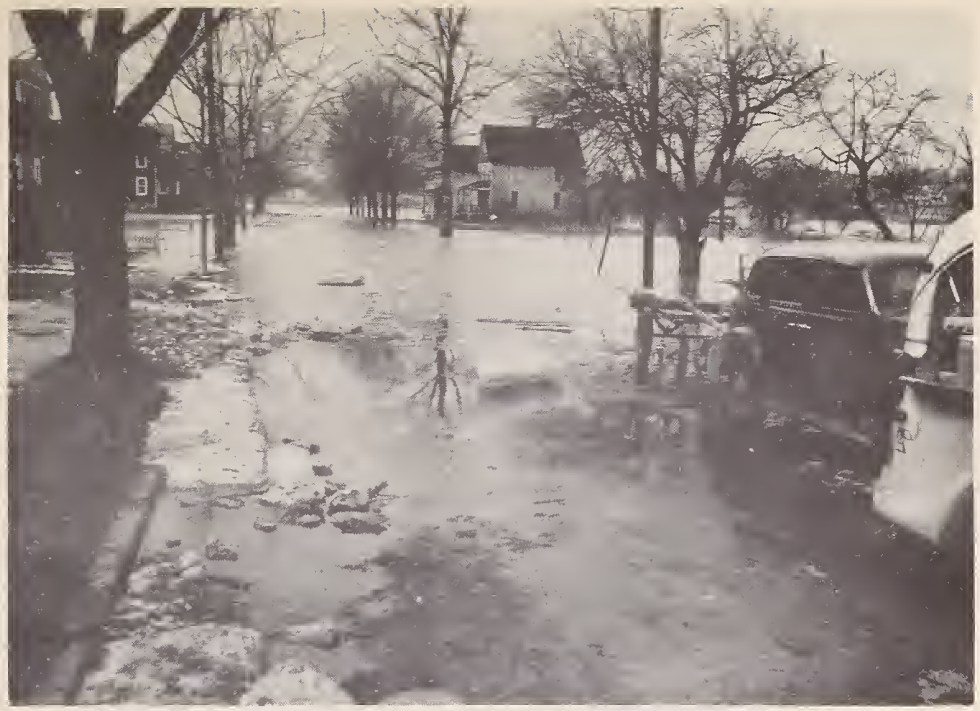
RECOMMENDED
PRINCIPAL ENGINEER

APPROVED
LIEUT. COL. CORPS OF ENGINEERS
DISTRICT ENGINEER

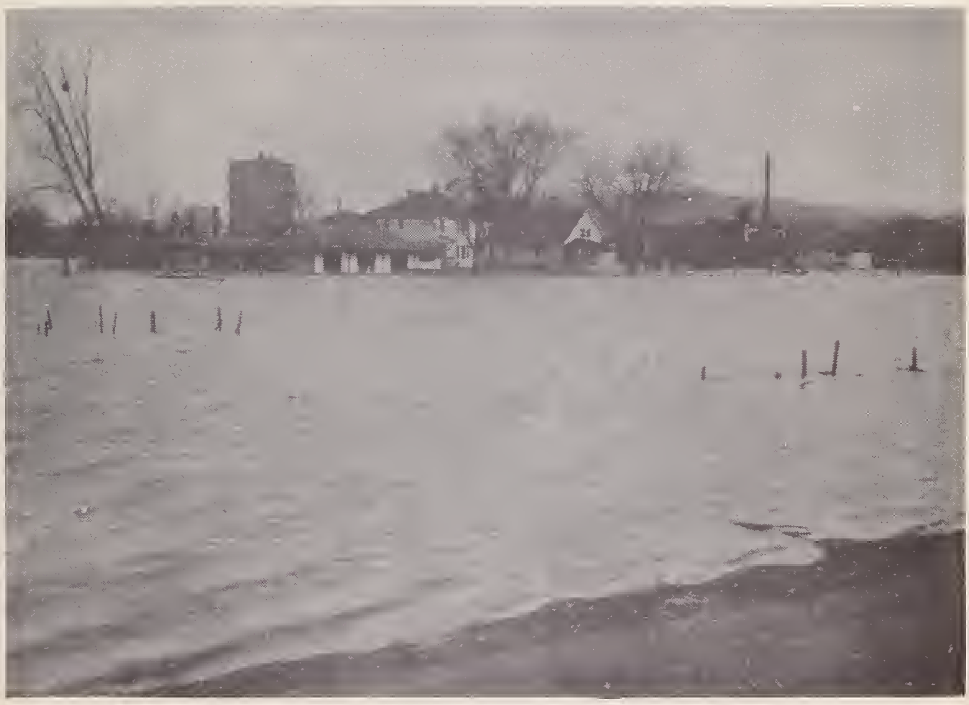
DESIGN SECTION

DRAWN BY F.L.B.
TRACED BY E.H.M.
CHECKED BY A.L.

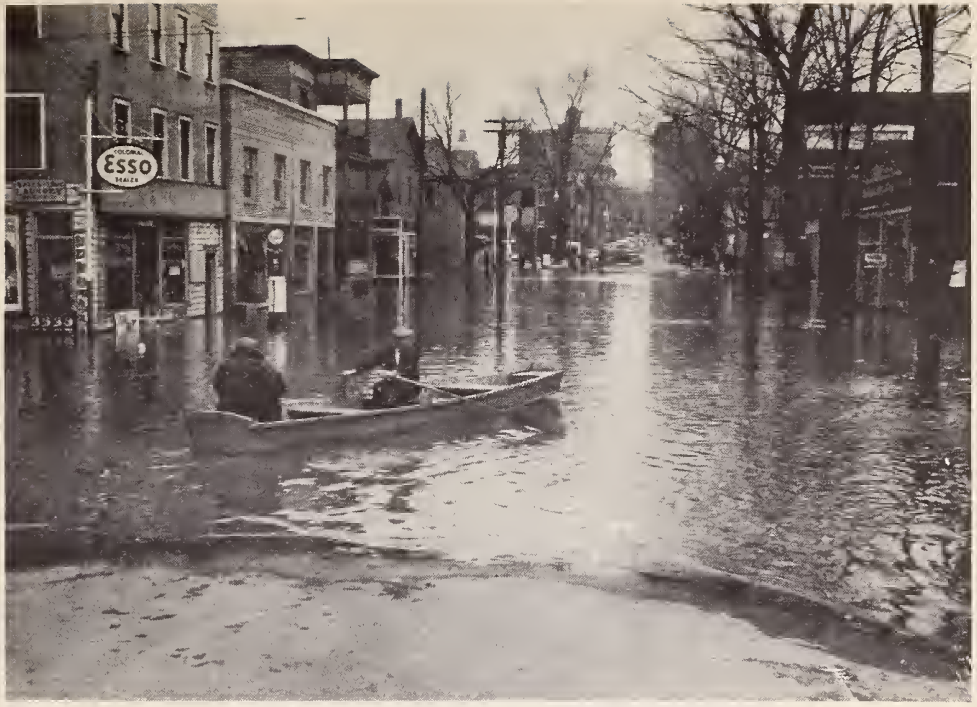
FILE NO. 6402-12



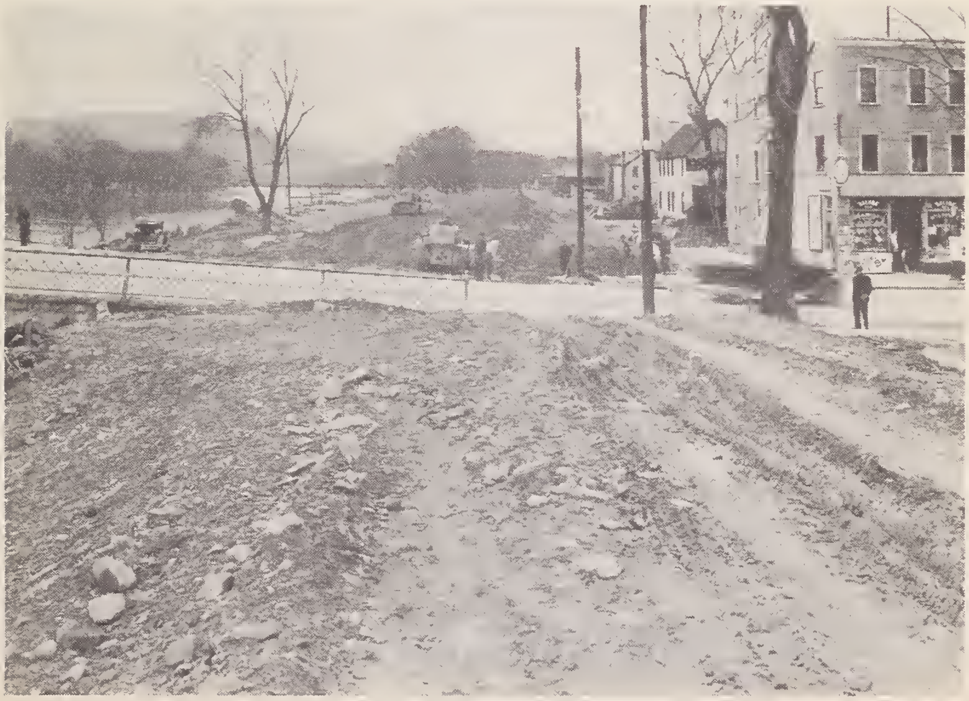
SUSQUEHANNA RIVER, BINGHAMTON, N. Y.
FLOOD OF APRIL 1940
Jackson Street looking west from
Tompkins Street.



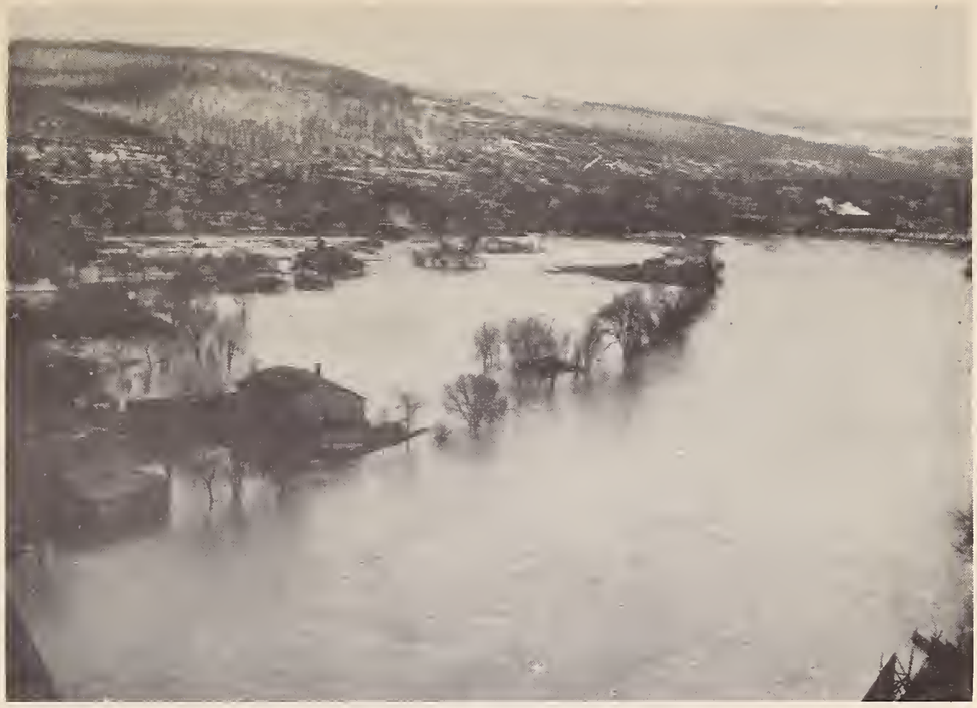
SUSQUEHANNA RIVER, BINGHAMTON, N. Y.
FLOOD OF APRIL 1940
Hodskins Flats - looking northeast
from a point about 200 feet north
of Conklin Avenue & Alfred Street.



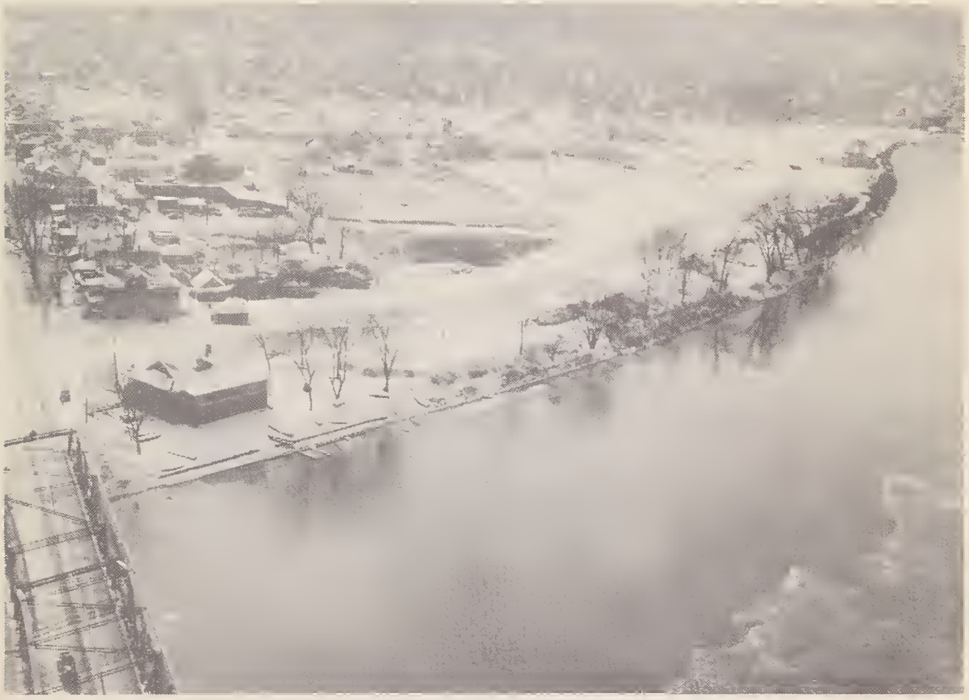
SUSQUEHANNA RIVER, BINGHAMTON, N. Y.
FLOOD OF APRIL 1940
Exchange Street, north from
Exchange Street Bridge.



SUSQUEHANNA RIVER, BINGHAMTON, N. Y.
SECTION NO. 2
Levee construction on the right
bank at Exchange Street.



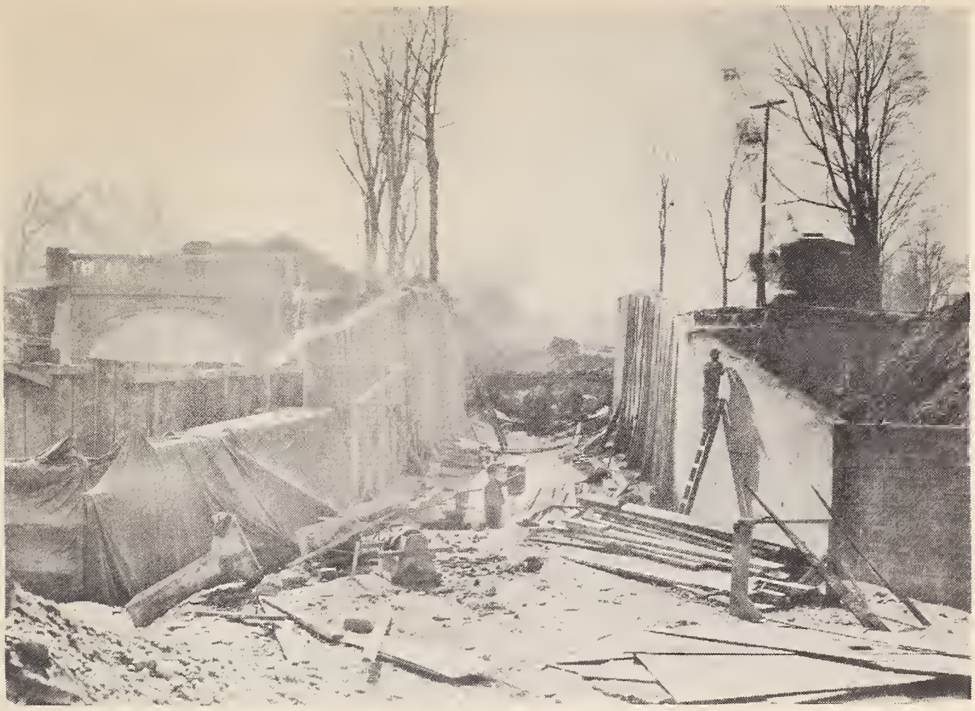
SUSQUEHANNA RIVER, BINGHAMTON, N. Y.
FLOOD OF APRIL 1940
Left bank, downstream of Tompkins
Street Bridge.



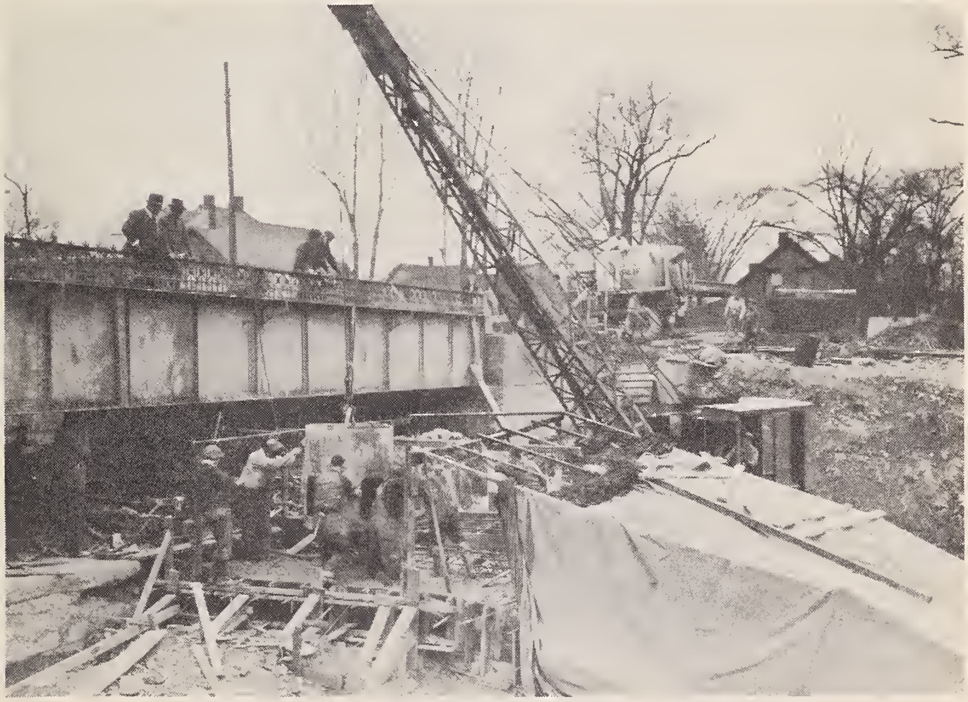
SUSQUEHANNA RIVER, BINGHAMTON, N. Y.
SECTION NO. 2
Levee on the left bank, downstream
from Tompkins Street.

SUSQUEHANNA RIVER, BINGHAMTON, N. Y.
SECTION NO. 1
Levee construction on the left
bank below Park Creek.

SUSQUEHANNA RIVER, BINGHAMTON, N. Y.
SECTION NO. 1
Concrete flood wall on the left bank
between Exchange and DeRussey Streets.



PARK CREEK, BINGHAMTON, N. Y.
SECTION NO. 1
Conduit outlet structure.



PIERCE CREEK, BINGHAMTON, N. Y.
SECTION NO. 2
Placing concrete in the drop
structure.

CORNING, NEW YORK

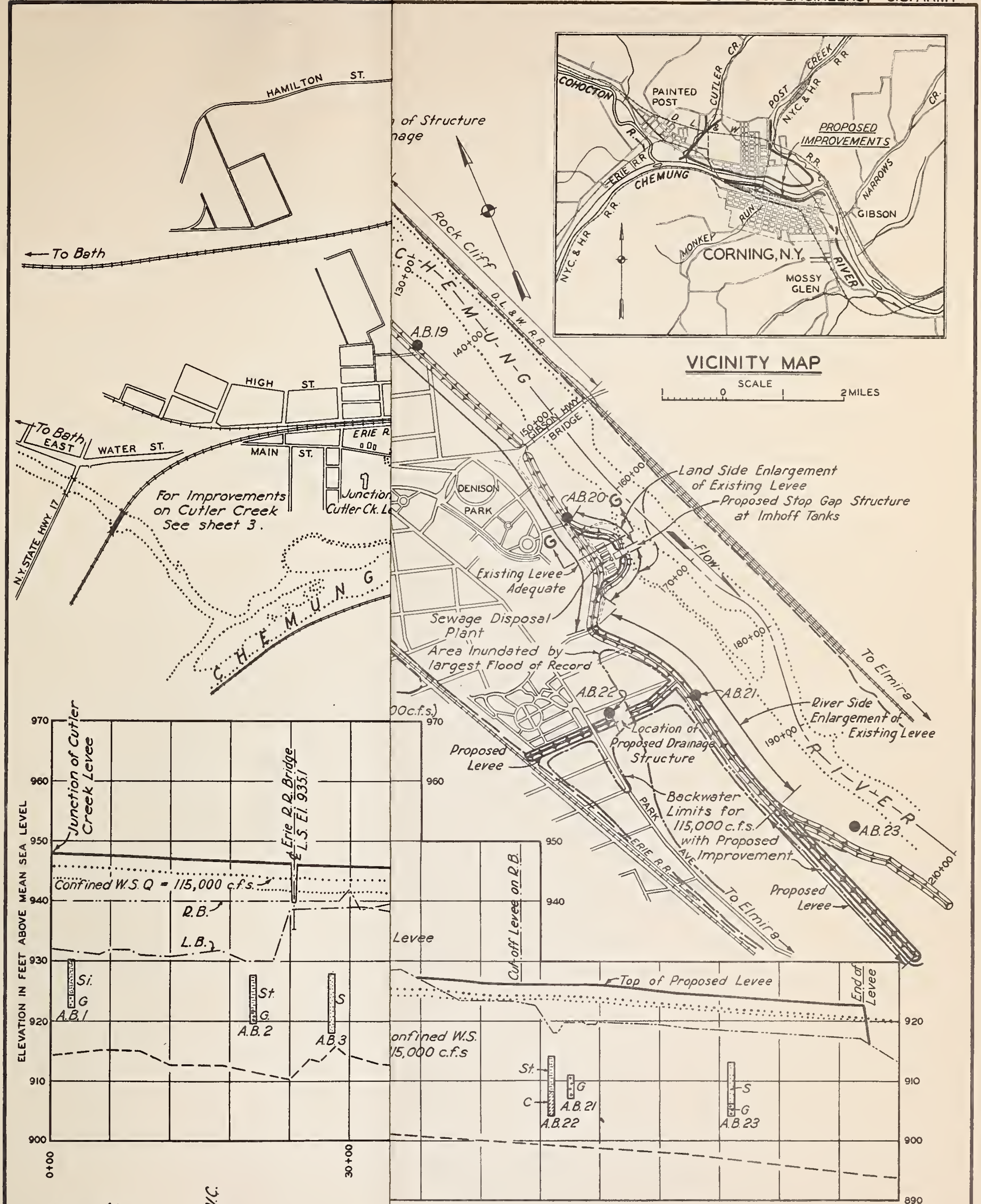
The city of Corning, New York, is on the Chemung River, a short distance below where it is formed by the junction of the Tioga and Cohocton Rivers (Plate 12). The city has been subject to flooding from the river and from tributary creeks, especially Cutler Creek. The major floods have been those of 1889, 1935, and 1940. Studies have shown it to be impracticable to protect the city by reservoirs, so the entire protection is being supplied by flood walls and levees.

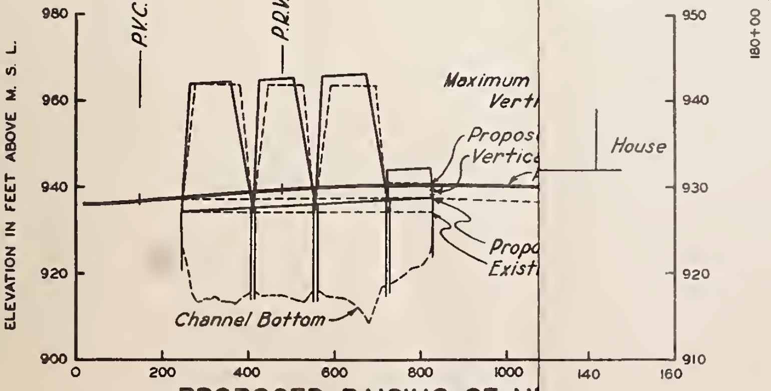
The project will increase the non-damaging capacity of the Chemung River from 40,000 to 115,000 c.f.s. and that of Cutler Creek from 2,000 to 9,000 c.f.s. The improvement will provide protection from a discharge approximately 60 percent larger than the 1935 flood, the second largest of record. Views of inundation during the 1940 flood, comparable to that of 1935, are shown on Plates 14 and 15.

The improvement will consist of four or more sections, to be prosecuted as separate contracts. Section No. 1 involves protection of the left bank of the Cohocton and Chemung Rivers from the Erie Railroad bridge in Painted Post to that at Corning (Plate 13), and improvement of Cutler Creek. The lower end of the existing Painted Post levee will be raised, and a new levee will be built below the mouth of Cutler Creek. The Cutler Creek improvement will consist of a realigned channel, a conduit, wing

levees, and three drop structures. Construction under contract on Section No. 1 of the improvement was started on July 12, 1940, and to date is approximately 30 percent completed. The estimated date of completion is in November 1941. The Chemung River levee and the upper wing levees, totaling 123,000 cubic yards of material, have been completed except for seeding. The Painted Post levee enlargement is about 75 percent completed. About 5,000 cubic yards of material have been excavated from the conduit area and approximately 1,300 cubic yards of concrete have been placed in the conduit. Plate 16 shows a general view of the progress of construction on the entire project, and Plates 17 and 18 show details of the work on Cutler Creek.

The remainder of the project consists of a pumping plant; levees along the left bank of the Chemung River from Section No. 1 to the mouth of Post Creek; walls and levees along the right bank of the Chemung River from high ground at the west end of the city to high ground at the east end; and a levee along the right bank of Post Creek. Plans are now being prepared, and construction will begin as soon as possible.


VICINITY MAP
SCALE
1 0 1 2 MILES
COHOCTON R.
PAINTED POST
CUTLER CR.
POST CREEK
N.Y.C. & H.R. R.R.
D.L. & W.
PROPOSED IMPROVEMENTS
ERIE R.R.
CHEMUNG
R.R.
NARROWS
CR.
GIBSON
N.Y.C. & H.R.
MONKEY RUN
CORNING, N.Y.
MOSSY GLEN
RIVER
HAMILTON ST.
To Bath
HIGH ST.
To Bath
EAST WATER ST.
MAIN ST.
ERIE R.R.
N.Y. STATE HWY. 17
For Improvements on Cutler Creek See sheet 3.
Junction Cutler Ck. L
C H E M U N G
of Structure
nage
Rock Cliff
D.L. & W. R.R.
C-H-E-M-U-N-G
130+00
140+00
150+00
A.B.19
GIBSON HWY. BRIDGE
DENISON PARK
A.B.20
G
G
160+00
170+00
180+00
190+00
210+00
Land Side Enlargement of Existing Levee
Proposed Stop Gap Structure at Imhoff Tanks
Flow
Existing Levee Adequate
Sewage Disposal Plant
Area Inundated by largest Flood of Record
00c.f.s.)
A.B.22
A.B.21
Location of Proposed Drainage Structure
Proposed Levee
River Side Enlargement of Existing Levee
To Elmira
R-I-V-E-R
A.B.23
Backwater Limits for 115,000 c.f.s. with Proposed Improvement
PARK AVE.
ERIE R.R.
To Elmira
Proposed Levee
ELEVATION IN FEET ABOVE MEAN SEA LEVEL
970
960
950
940
930
920
910
900
890
Junction of Cutler Creek Levee
Erie R.R. Bridge
℄ L.S. El. 933.1
Confined W.S. Q = 115,000 c.f.s.
R.B.
L.B.
Levee
Cut-off Levee on R.B.
Top of Proposed Levee
End of Levee
onfined W.S.
115,000 c.f.s
Si.
G
A.B.1
St.
G.
A.B.2
S
A.B.3
St.
C
G
A.B.21
A.B.22
S
G
A.B.23
0+00
30+00
180+00
210+00



PROPOSED RAISING OF NI

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

LOCAL IMPROVEMENT PROJECT

CORNING, N.Y.

SCALES: AS SHOWN

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. MAY 20, 1939

SUBMITTED: J. L. Chatham
SENIOR ENGINEER

RECOMMENDED:
PRINCIPAL ENGINEER

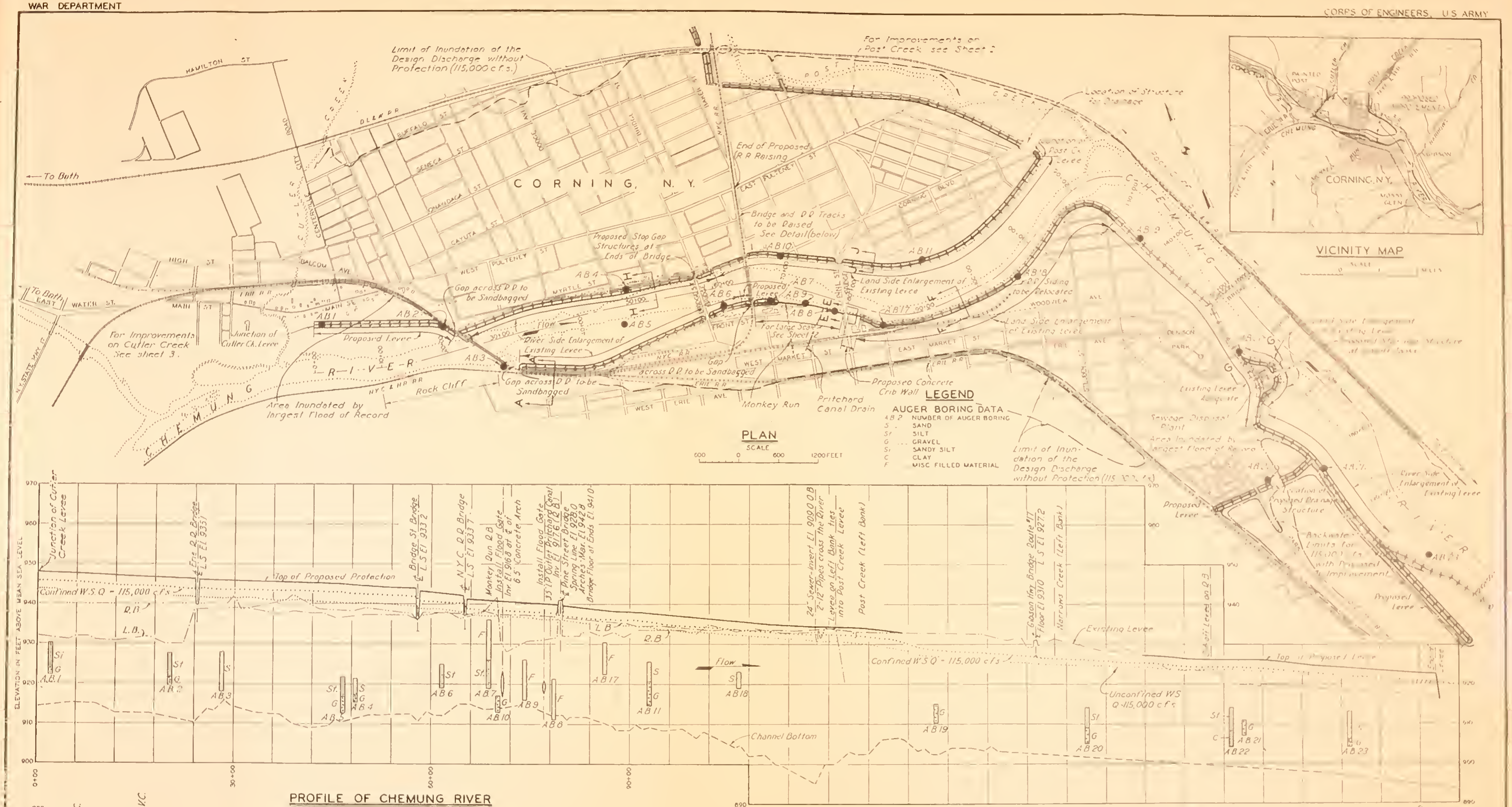
APPROVED: B. Wold
MAJOR, CORPS OF ENGINEERS, U.S. ARMY DISTRICT ENGINEER

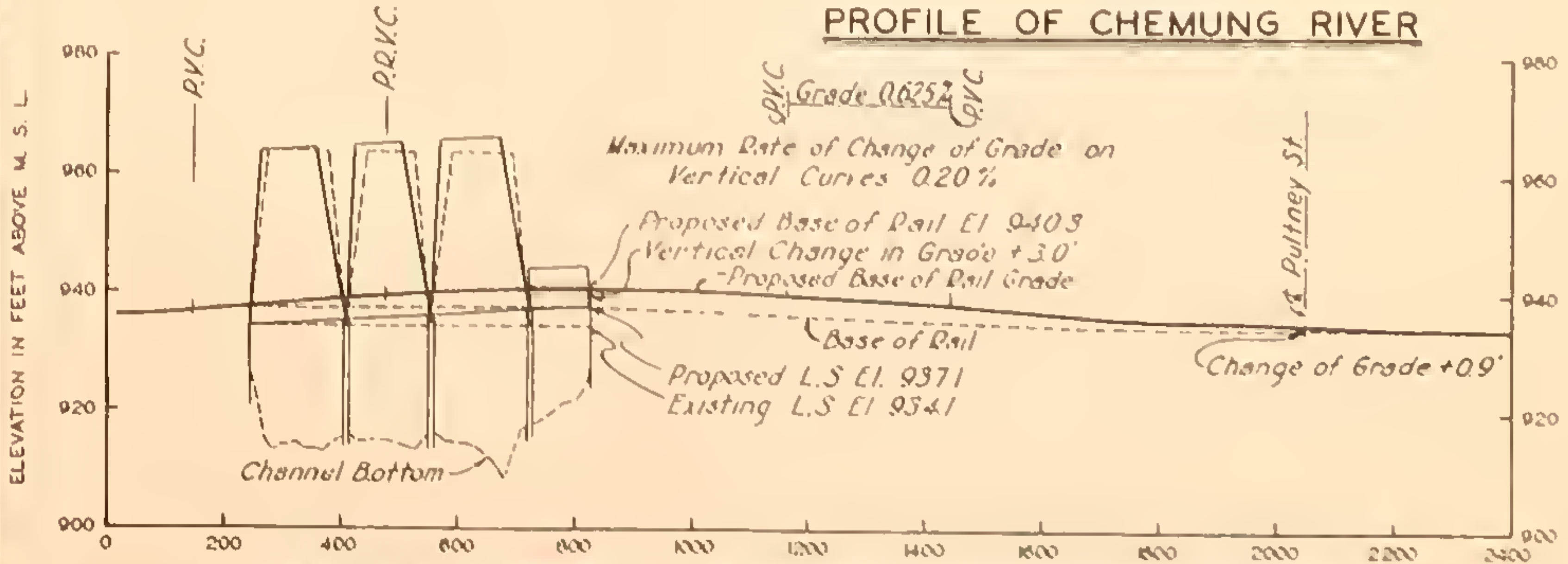
DRAWN BY: K.G.L.
TRACED BY: E.H.W.
CHECKED BY: A.L.

FILE NO. 6603-1

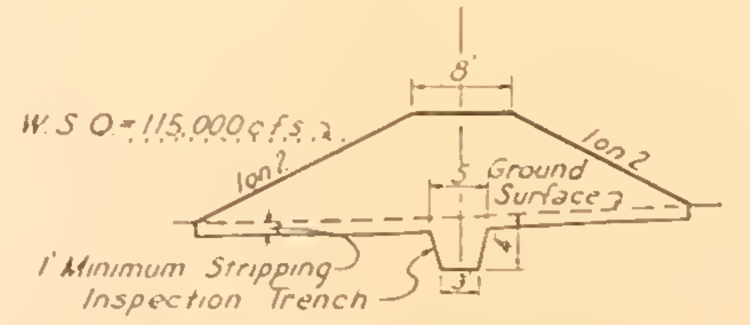
WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY


CORNING, N.Y.
HAMILTON ST
←To Bath
To Bath
EAST WATER ST
MAIN ST
HIGH ST
BALCOM AVE
WEST PULTENEY ST
MYRTLE ST
CAYUTA ST
CHEMUNG ST
SENECA ST
BUFFALO ST
DL&W RR
NYC RR
ERIE RR
NYC & HR RR
EAST PULTENEY ST
CORNING BLVD
EAST MARKET ST
WEST MARKET ST
WEST ERIE AVE
FRONT ST
DENISON PARK
N.Y. STATE HWY
CHEMUNG RIVER
C-H-E-M-U-N-G
R-I-V-E-R
POST CREEK
Limit of Inundation of the Design Discharge without Protection (115,000 c.f.s.)
For Improvements on Post Creek see Sheet 2
Location of Structure for Drainage
Junction of Post Cr. Levee
End of Proposed R.R. Raising
Bridge and R.R. Tracks to be Raised See Detail (below)
Proposed Stop Gap Structures at Ends of Bridge
Gap across R.R. to be Sandbagged
For Improvements on Cutler Creek See sheet 3.
Junction of Cutler Ck. Levee
Proposed Levee
River Side Enlargement of Existing Levee
Land Side Enlargement of Existing Levee
R.R. Siding to be Relocated
For Large Scale See Sheet 12
Gap across R.R. to be Sandbagged
Proposed Concrete Crib Wall
Pritchard Canal Drain
Monkey Run
Rock Cliff
Area Inundated by Largest Flood of Record
Existing Levee Adequate
Sewage Disposal Plant
Area Inundated by Largest Flood of Record
Limit of Inundation of the Design Discharge without Protection (115,000 c.f.s.)
Location of Proposed Drainage Structure
Backwater Limits for 115,000 c.f.s. with Proposed Improvement
River Side Enlargement of Existing Levee
Proposed Levee
Flow
AB 1
AB 2
AB 3
AB 4
AB 5
AB 6
AB 7
AB 8
AB 9
AB 10
AB 11
AB 17
AB 18
AB 19
AB 20
AB 21
AB 22
AB 23
A
H
E
G
PLAN
SCALE
600 0 600 1200 FEET
LEGEND
AUGER BORING DATA
AB 2 NUMBER OF AUGER BORING
S SAND
St SILT
G GRAVEL
Si SANDY SILT
C CLAY
F MISC FILLED MATERIAL
VICINITY MAP
CORNING, N.Y.
PAINTED POST
CHEMUNG
RIVER
PROFILE OF CHEMUNG RIVER
ELEVATION IN FEET ABOVE MEAN SEA LEVEL
970
960
950
940
930
920
910
900
890
0+00
30+00
60+00
90+00
120+00
150+00
180+00
Junction of Cutler Creek Levee
Erie R.R. Bridge L.S. El. 933.1
Bridge St. Bridge L.S. El. 933.2
N.Y.C. R.R. Bridge L.S. El. 933.7
Monkey Run D.B. Install Flood Gate Inv. El. 916.8 at Exit 6.5' Concrete Arch
Install Flood Gate 3.5' D. Outlet Pritchard Canal Inv. El. 917.6
Pine Street Bridge Spring Line El. 928.0 Arches Max. El. 942.8 Bridge Floor at Ends El. 941.0
24" Sewer-Invert El. 909.0 D.B. 2-12" Pipes cross the River
Levee on Left Bank ties into Post Creek Levee
Post Creek (Left Bank)
Gibson Hwy. Bridge Route #17 Floor El. 931.0 L.S. El. 927.2
Narrows Creek (Left Bank)
Top of Proposed Protection
Confined W.S.Q. - 115,000 c.f.s.
R.B.
L.B.
Existing Levee
Top of Proposed Levee
Unconfined W.S. Q-115,000 c.f.s.
Channel Bottom
Flow


P.V.C.
P.R.V.C.
P.V.C.
Grade 0.625%
P.V.C.
Maximum Rate of Change of Grade on Vertical Curves 0.20%
Proposed Base of Rail El. 940.3
Vertical Change in Grade +3.0'
Proposed Base of Rail Grade
Base of Rail
Proposed L.S. El. 937.1
Existing L.S. El. 934.1
Channel Bottom
Change of Grade +0.9'
Pulteney St.
ELEVATION IN FEET ABOVE M.S.L.
980
960
940
920
900
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400

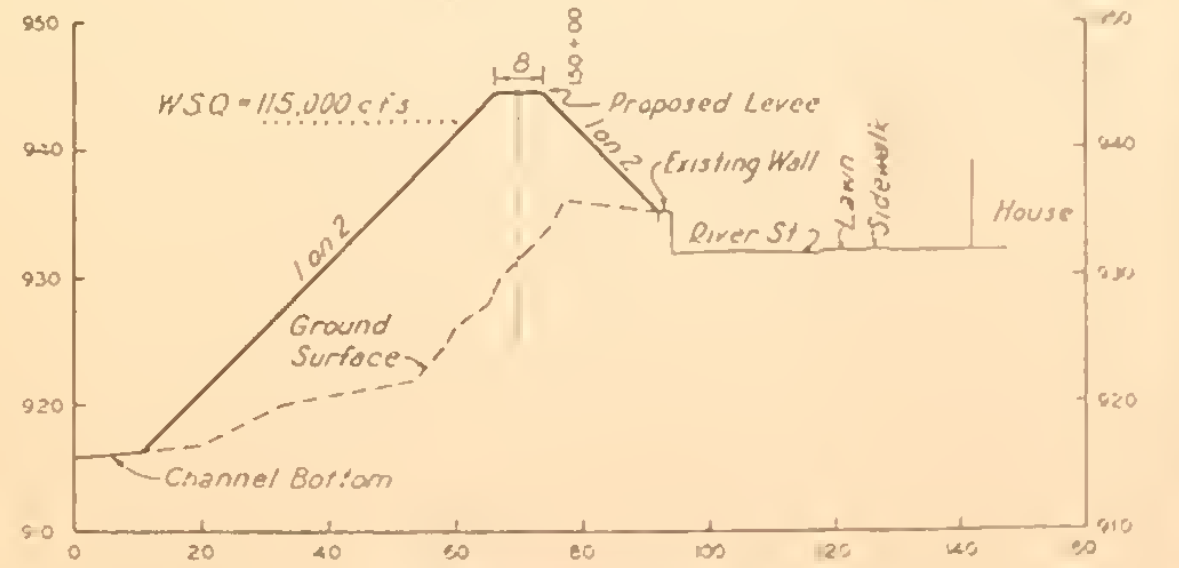
PROPOSED RAISING OF NEW YORK CENTRAL R.R. BRIDGE


W.S.Q.=115,000 c.f.s.
8'
1 on 2
1 on 2
Ground Surface
1' Minimum Stripping
Inspection Trench

TYPICAL LEVEE SECTION

SCALE
10 0 10 20 FEET

NOTE.
ELEVATIONS ARE IN FEET AND REFER TO THE PLANE OF MEAN SEA LEVEL AT SANDY HOOK N.J.


W.S.Q.=115,000 c.f.s.
8'
Proposed Levee
1 on 2
1 on 2
Existing Wall
River St.
Lawn
Sidewalk
House
Ground Surface
Channel Bottom
950
940
930
920
910
0
20
40
60
80
100
120
140
160

SECTION H-H

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

LOCAL IMPROVEMENT PROJECT

CORNING, N.Y.

U.S. ENGINEER OFFICE BINGHAMTON DISTRICT BINGHAMTON N.Y. MAY 29, 1939

J. L. Rathan
SENIOR ENGINEER

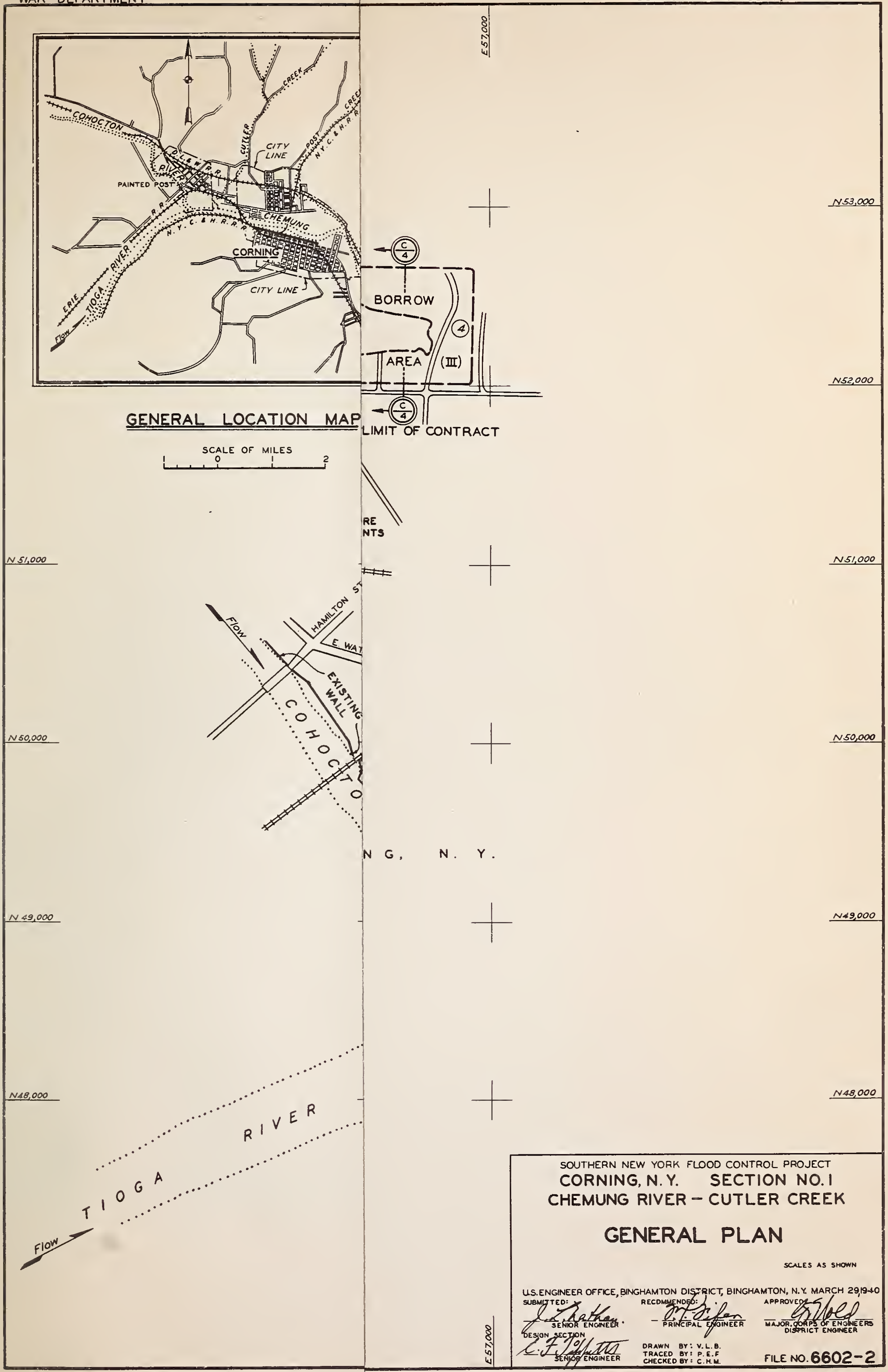
PRINCIPAL ENGINEER

MAJOR, CORPS OF ENGINEERS, U.S. ARMY DISTRICT ENGINEER

DRAWN BY P.G.L.
TRACED BY E.H.W.
CHECKED BY A.L.

FILE NO 6603-1

PLATE 12


COHOCTON
D.L.&W. R.R.
RIVER
CUTLER
CREEK
CITY LINE
POST
CREEK
N.Y.C.& H.R.R.
PAINTED POST
R.R.
N.Y.C.& H.R.R.R.
CHEMUNG
CORNING
TIOGA RIVER
ERIE
CITY LINE
Flow
GENERAL LOCATION MAP
SCALE OF MILES
1 0 1 2
E57,000
C/4
BORROW
AREA
4
(III)
C/4
LIMIT OF CONTRACT
N53,000
N52,000
RE
NTS
N51,000
N51,000
HAMILTON ST
Flow
E. WAT
EXISTING WALL
COHOCTO
N50,000
N50,000
NG, N. Y.
N49,000
N49,000
N48,000
N48,000
TIOGA RIVER
Flow
E57,000

SOUTHERN NEW YORK FLOOD CONTROL PROJECT
CORNING, N.Y. SECTION NO. 1
CHEMUNG RIVER – CUTLER CREEK

GENERAL PLAN

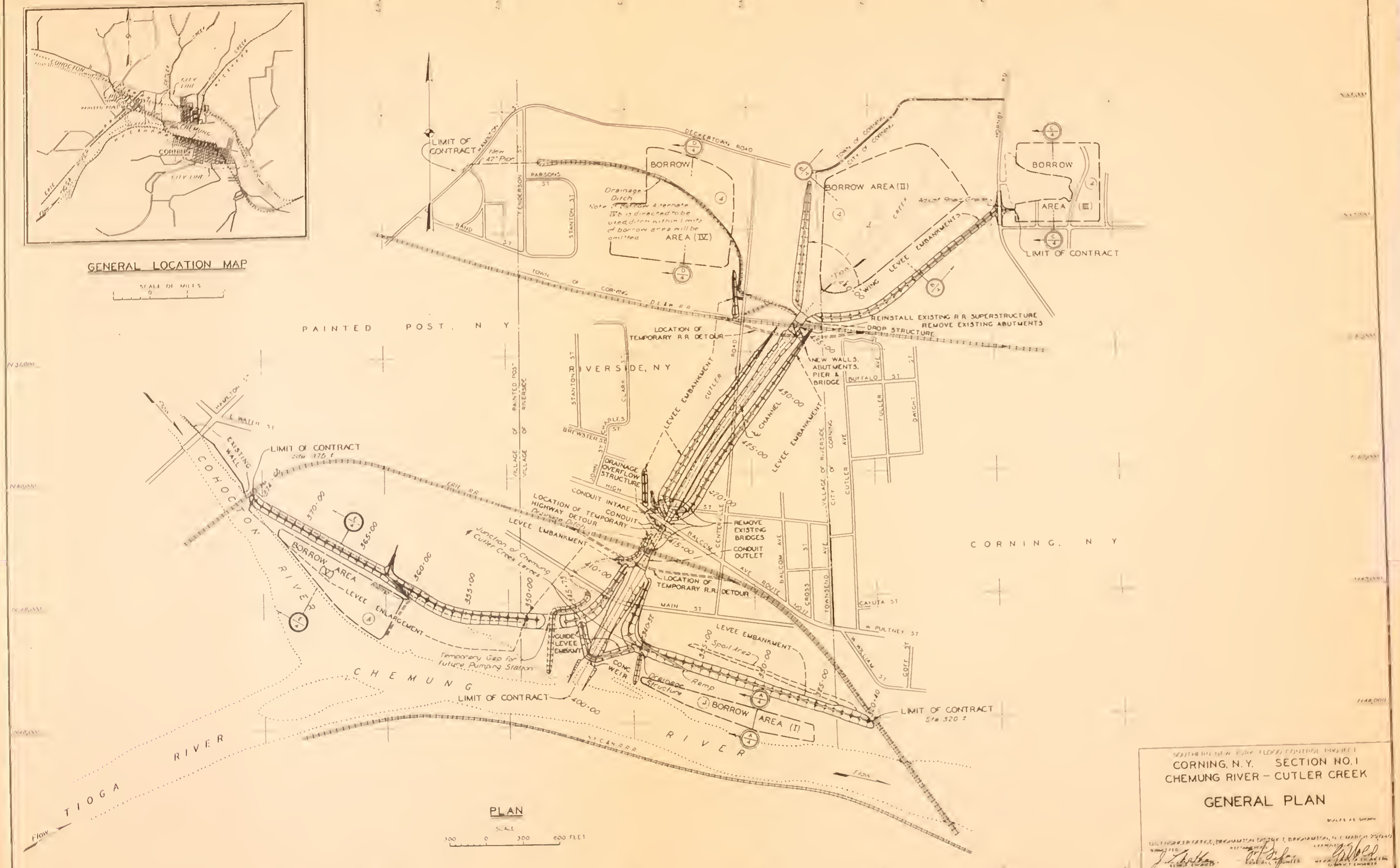
SCALES AS SHOWN

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. MARCH 29, 1940

SUBMITTED:	RECOMMENDED:	APPROVED:
J. L. Nathan SENIOR ENGINEER	W. T. Fifer PRINCIPAL ENGINEER	MAJOR, CORPS OF ENGINEERS DISTRICT ENGINEER
DESIGN SECTION SENIOR ENGINEER	DRAWN BY: V.L.B. TRACED BY: P.E.F CHECKED BY: C.H.M.	FILE NO. 6602-2

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY


COHOCTON
CITY LINE
PAINTED POST
CHEMUNG
CORNING
CITY LINE
ERIE
SCALE OF MILES
LIMIT OF CONTRACT
New 42" Pipe
HAMILTON ST
HENDERSON ST
PARSONS ST
STANTON ST
BAND ST
DECKERTOWN ROAD
BORROW
Drainage Ditch
Note: If Borrow Alternate IVb is directed to be used ditch within limits of borrow area will be omitted
AREA (IV)
TOWN OF CORNING
CITY OF CORNING
BORROW AREA (II)
Adjust Road Grades
WING LEVEE EMBANKMENTS
BORROW
AREA (III)
LIMIT OF CONTRACT
DL&W RR
REINSTALL EXISTING R.R. SUPERSTRUCTURE
REMOVE EXISTING ABUTMENTS
DROP STRUCTURE
LOCATION OF TEMPORARY R.R. DETOUR
NEW WALLS, ABUTMENTS, PIER & BRIDGE
BUFFALO ST
FULLER AVE
DWIGHT ST
PAINTED POST, N.Y.
RIVERSIDE, N.Y.
STANTON ST
CLARK ST
CHARLES ST
BREWSTER ST
JOHN ST
LEVEE EMBANKMENT
CUTLER ROAD
℄ CHANNEL
430+00
425+00
LEVEE EMBANKMENT
VILLAGE OF RIVERSIDE
CITY OF CORNING
CUTLER AVE
VILLAGE OF PAINTED POST
VILLAGE OF RIVERSIDE
DRAINAGE OVERFLOW STRUCTURE
HIGH ST
CONDUIT INTAKE
CONDUIT
LOCATION OF TEMPORARY HIGHWAY DETOUR
Drainage Ditch
LEVEE EMBANKMENT
Junction of Chemung & Cutler Creek Levees
420+00
415+00
410+00
BALCOM
CENTERVILLE
REMOVE EXISTING BRIDGES
CONDUIT OUTLET
LOCATION OF TEMPORARY R.R. DETOUR
BALCOM AVE
ST
CROSS
TOWNSEND AVE
CAYUTA ST
AVE ROUTE 17
MAIN ST
W PULTNEY ST
W WILLIAM ST
GOFF ST
CORNING, N.Y.
HAMILTON ST
L WALSH ST
EXISTING WALL
LIMIT OF CONTRACT Sta 376±
ERIE RR
370+00
365+00
360+00
355+00
350+00
345+75
COHOCTON RIVER
BORROW AREA (V)
LEVEE ENLARGEMENT
GUIDE LEVEE EMBANKMENT
Temporary Gap for future Pumping Station
CONC WEIR
Drainage Structure
LEVEE EMBANKMENT
Spoil Area
Ramp
335+00
330+00
325+00
320+40
340+52
BORROW AREA (I)
LIMIT OF CONTRACT
400+00
LIMIT OF CONTRACT Sta 320±
CHEMUNG RIVER
TIOGA RIVER
Flow
Flow
SYCAMORE RR
SCALE
300 0 300 600 FEET

GENERAL LOCATION MAP

PLAN

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

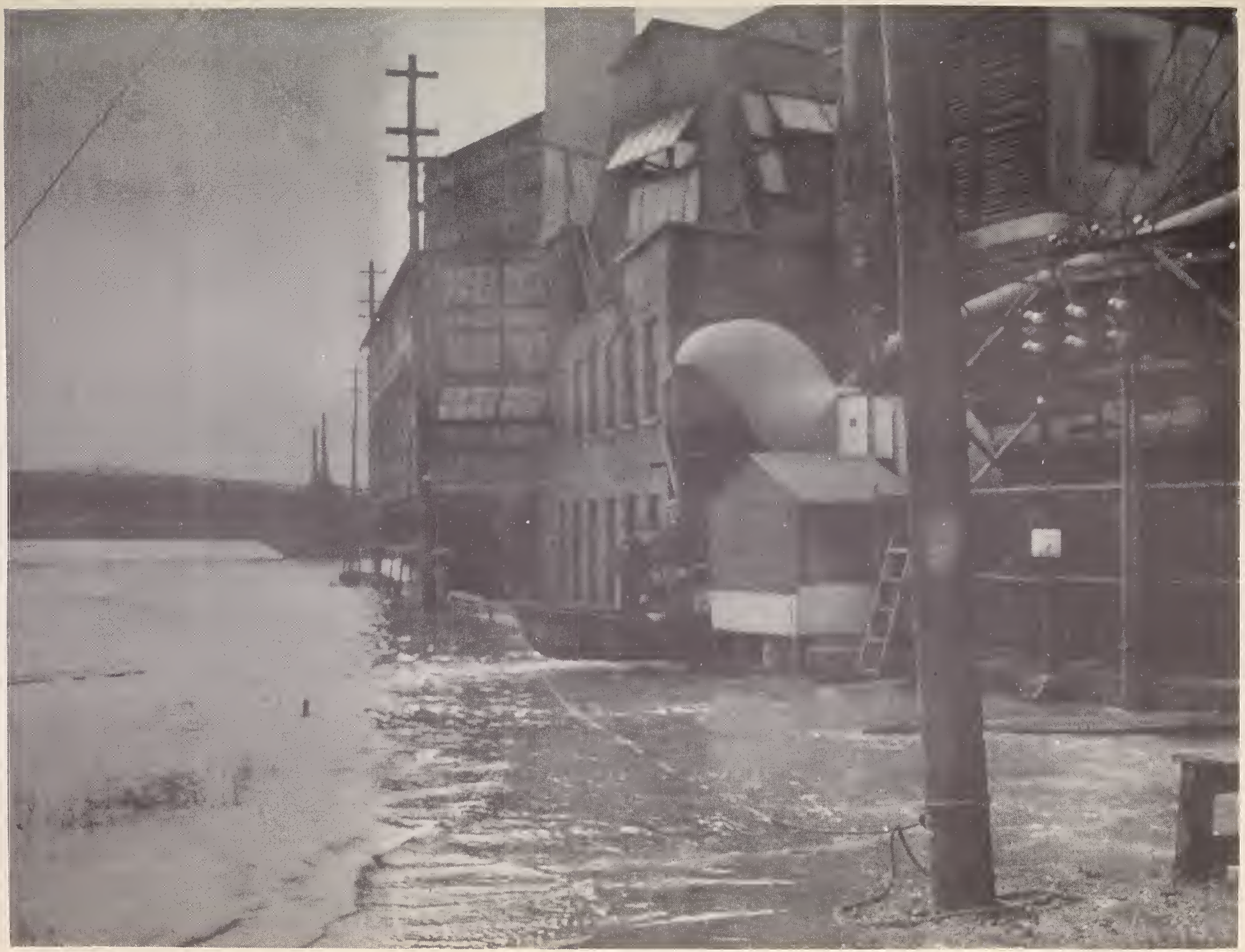
CORNING, N.Y. SECTION NO. 1
CHEMUNG RIVER – CUTLER CREEK

GENERAL PLAN

SCALES AS SHOWN

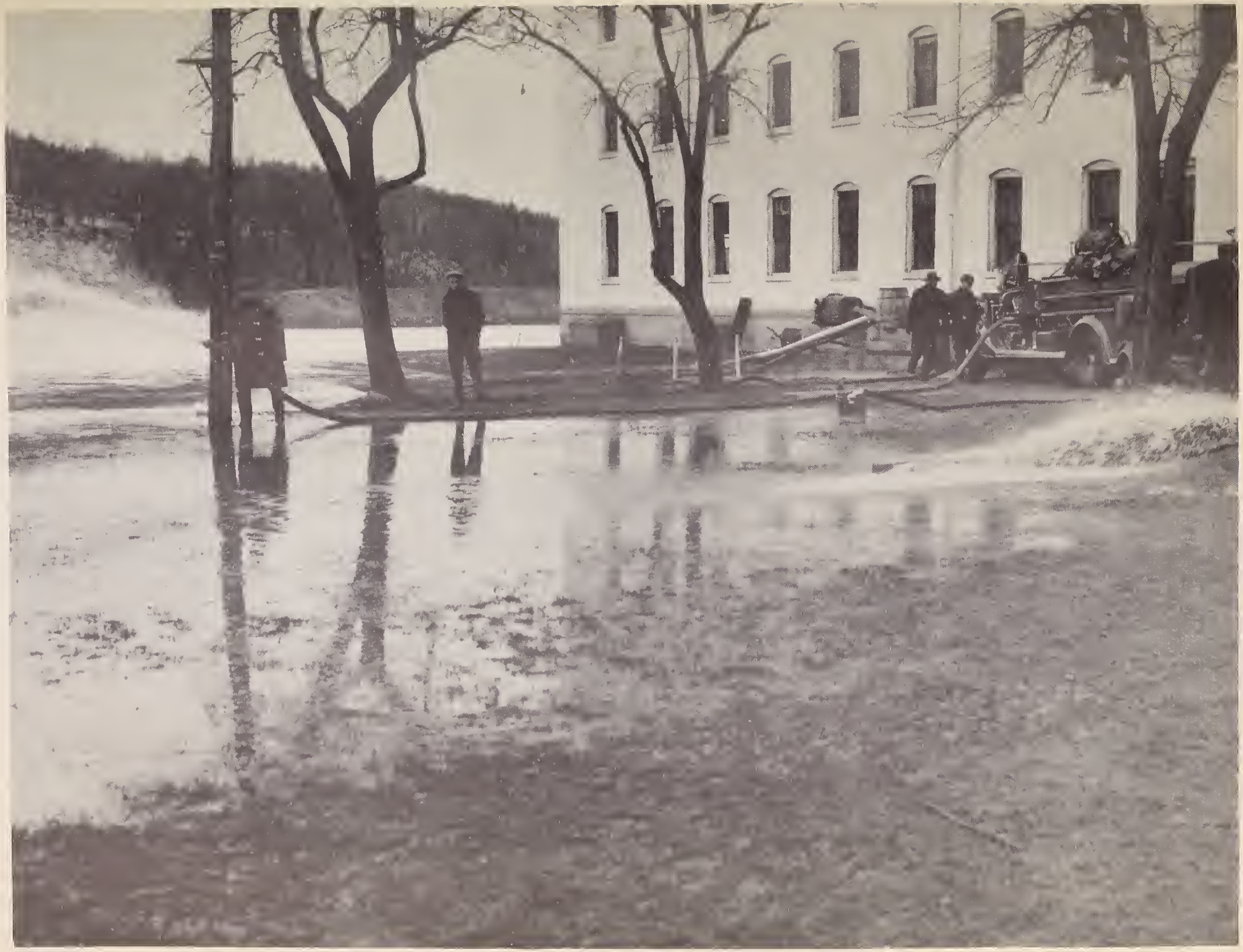
FILE NO. 8602-2

PLATE NO. 13

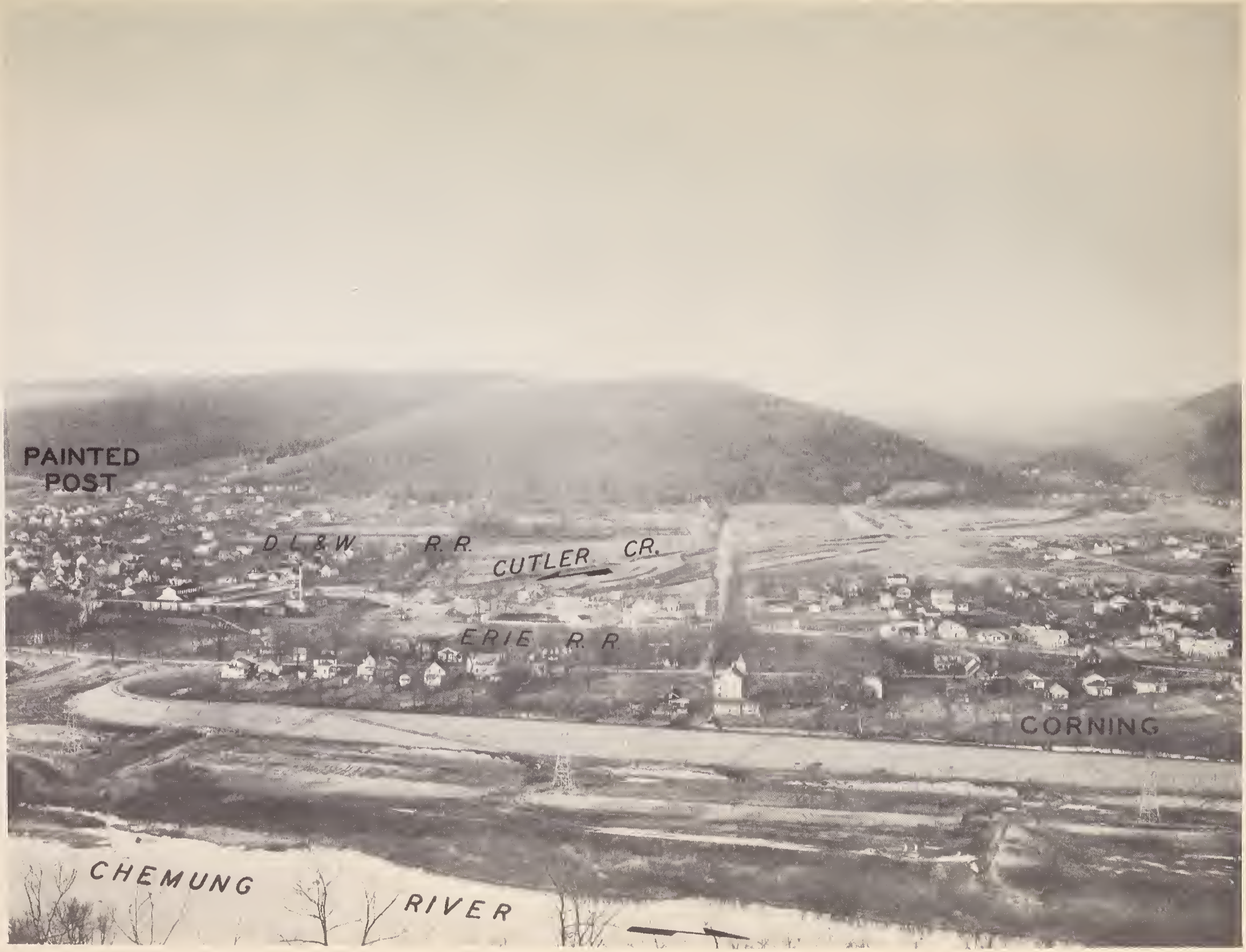


CHEMUNG RIVER, CORNING, N. Y. - FLOOD OF APRIL 1940
Corning Glass Works, factory "A".

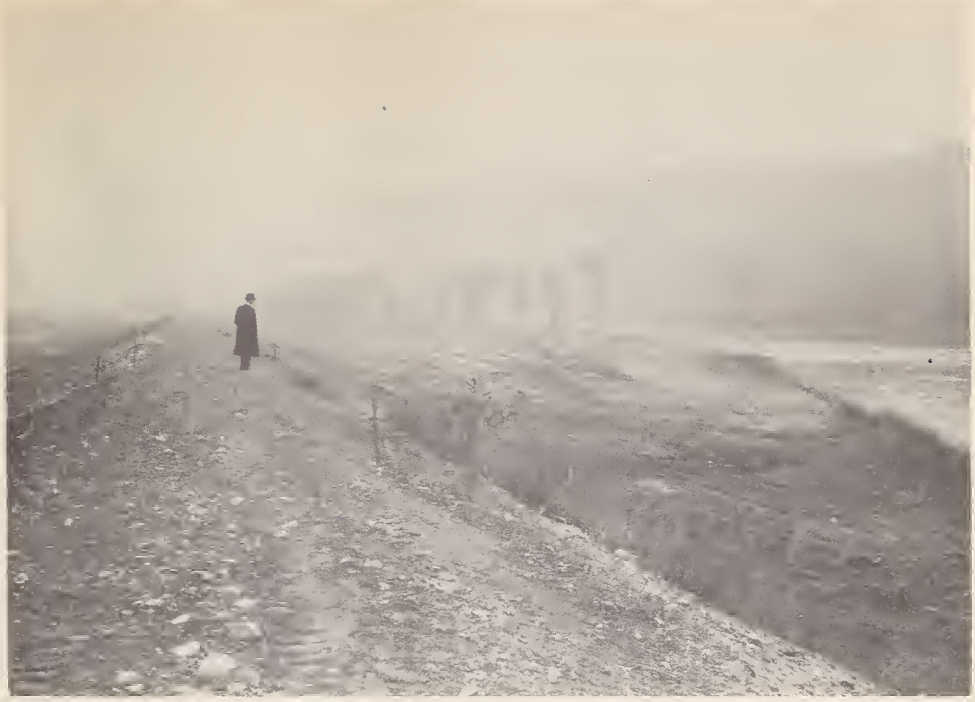
Plate 14



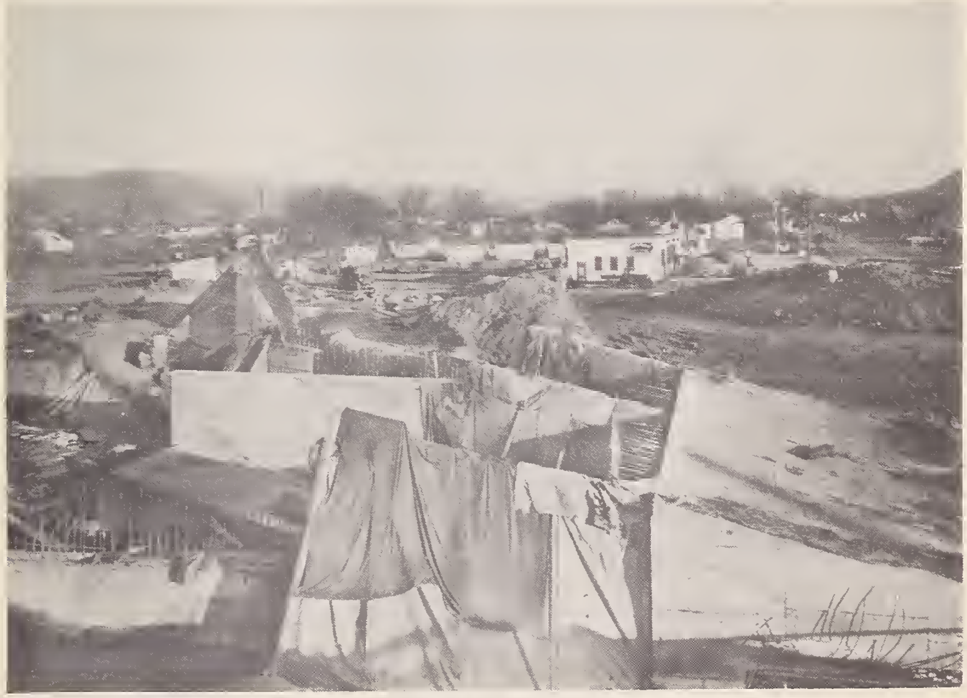
CHEMUNG RIVER, PAINTED POST, N. Y. - FLOOD OF APRIL 1940
Imperial Club House, showing flooding around lower end of Painted Post levee. Water was up to the top of foundation wall the previous night.


PAINTED POST
D. L. & W. R. R.
CUTLER CR.
ERIE R. R.
CORNING
CHEMUNG RIVER

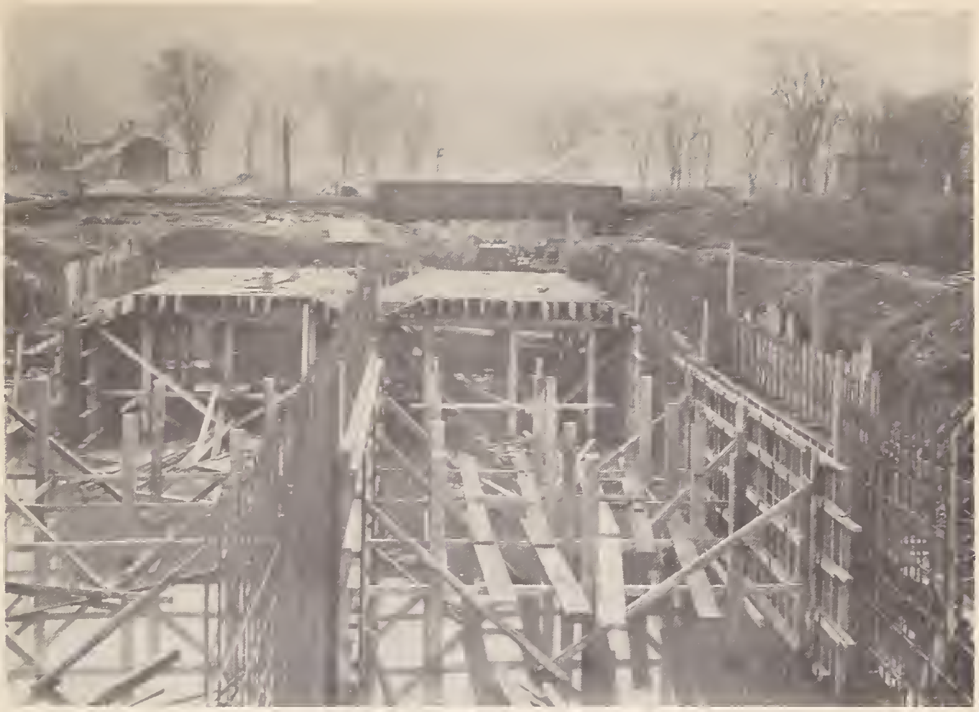
CHEMUNG RIVER, CORNING, N. Y. - SECTION NO. 1
General view of progress.



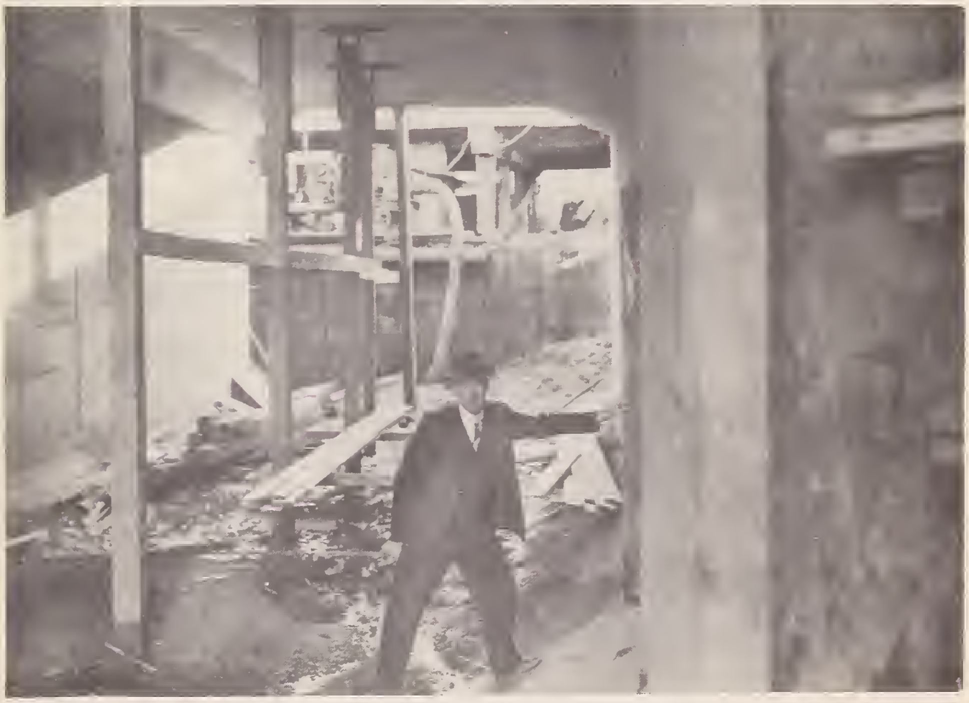
CHEMUNG RIVER, CORNING, N. Y.
SECTION NO. 1
Levee along left bank, downstream
from mouth of Cutler Creek.



CUTLER CREEK, CORNING, N. Y.
SECTION NO. 1
Conduit intake structure.



CUTLER CREEK, CORNING, N. Y.
SECTION NO. 1
Conduit construction.



CUTLER CREEK, CORNING, N. Y.
SECTION NO. 1
Interior of a section of the conduit.

ELMIRA, NEW YORK

The city of Elmira, New York, is on the Chemung River about 25 miles above its confluence with the Susquehanna River. Seely, Newtown, and Hoffman Creeks enter the river through the city. Several major floods have occurred in the city with the floods of 1889, 1935, and 1940 being the severest. As it is impractical to protect the city by flood control reservoirs, the protection is to be supplied by flood walls and levees.

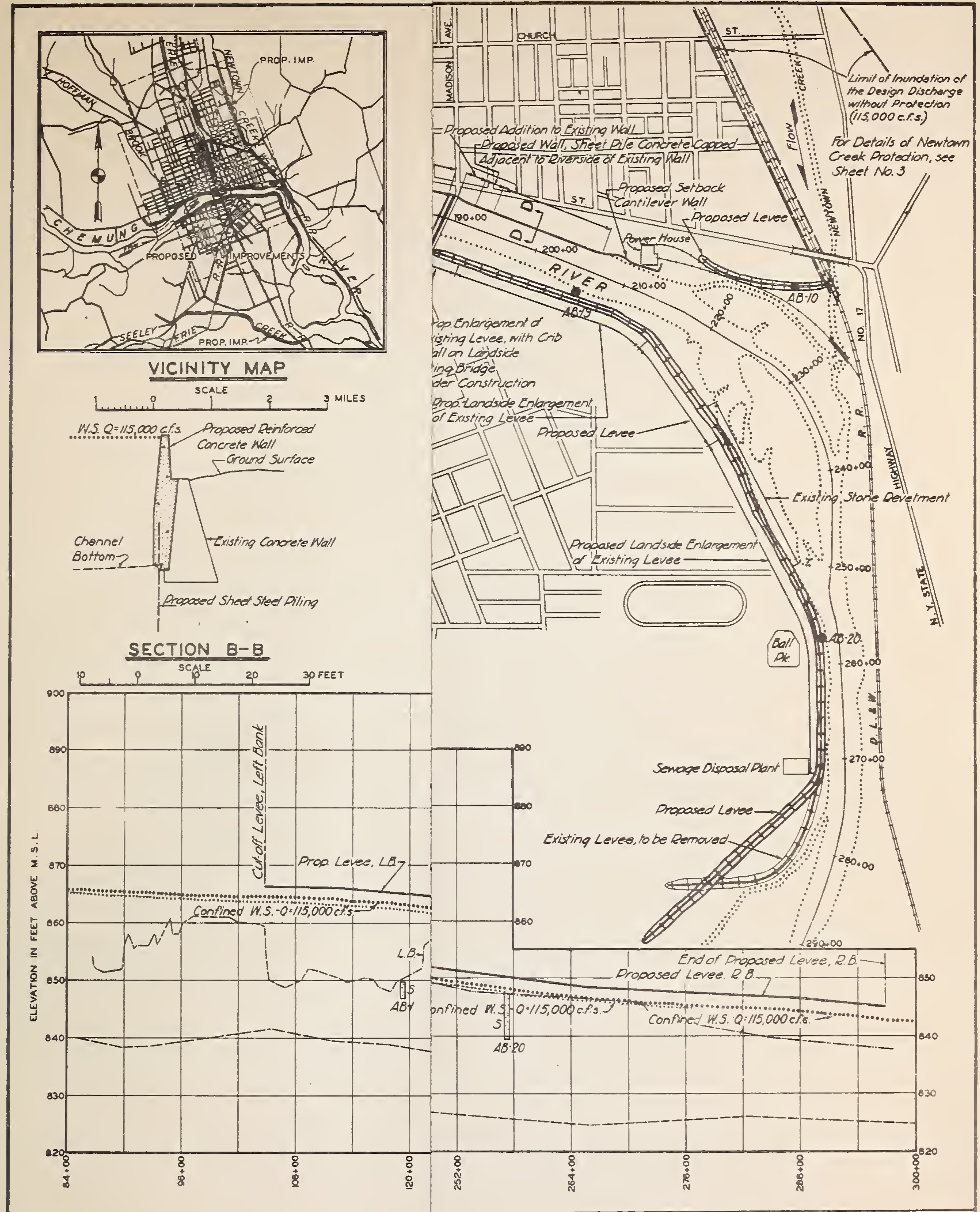
The flood protection works will increase the non-damaging capacity of the Chemung River from 60,000 c.f.s. to 100,000 c.f.s., that of Newtown Creek from 2,500 c.f.s. to 18,000 c.f.s., and that of Seely Creek from 10,000 c.f.s. to 26,000 c.f.s. The improvement will protect the city against a flood approximately 5 feet higher than the maximum flood of record, which occurred in June 1889.

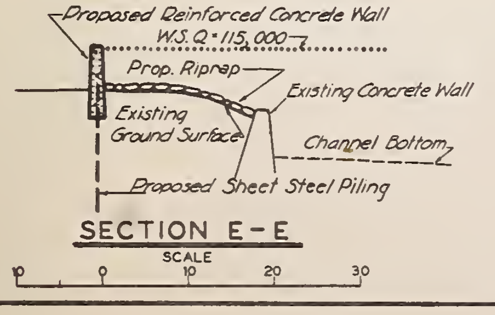
The flood protection works will consist of two or more sections to be prosecuted under separate contracts, and will include construction of new levees, enlargement of the old levees, and construction of new flood walls on both banks of the Chemung River; construction of an earth levee on the right bank of Newtown Creek; and construction of an earth levee and a concrete flood wall on the left bank of Seely Creek. Pumping for the disposal of interior drainage and appurtenant drainage structures will be

provided. The general plan is shown on Plates 19 to 21, inclusive. Pictures showing the flood of 1889 are shown on Plates 22 to 24, inclusive.

WAR DEPARTMENT

CORPS OF ENGINEERS. U.S.ARMY


PROP. IMP.
HOFFMAN
BROOK
ERIE
NEWTOWN
CREEK
CHEMUNG
PROPOSED
IMPROVEMENTS
R.R.
RIVER
SEELEY
ERIE
CREEK
PROP. IMP.
VICINITY MAP
SCALE
1 0 1 2 3 MILES
W.S. Q=115,000 c.f.s.
Proposed Reinforced Concrete Wall
Ground Surface
Channel Bottom
Existing Concrete Wall
Proposed Sheet Steel Piling
SECTION B-B
SCALE
10 0 10 20 30 FEET
ELEVATION IN FEET ABOVE M.S.L.
900
890
880
870
860
850
840
830
820
Cut-off Levee, Left Bank
Prop. Levee, L.B.
Confined W.S.-Q=115,000 c.f.s.
L.B.
AB-1
5
84+00
96+00
108+00
120+00
252+00
264+00
276+00
288+00
300+00
Confined W.S.-Q=115,000 c.f.s.
AB-20
End of Proposed Levee, R.B.
Proposed Levee, R.B.
Confined W.S. Q=115,000 c.f.s.
CHURCH
ST.
AVE.
MADISON
CREEK
Flow
NEWTOWN
Limit of Inundation of the Design Discharge without Protection (115,000 c.f.s.)
For Details of Newtown Creek Protection, see Sheet No. 3
Proposed Addition to Existing Wall
Proposed Wall, Sheet Pile Concrete Capped Adjacent to Riverside of Existing Wall
ST
Proposed Setback Cantilever Wall
Proposed Levee
Power House
190+00
200+00
210+00
220+00
230+00
240+00
250+00
260+00
270+00
280+00
290+00
D
D
RIVER
AB-19
AB-10
NO. 17
R.R.
rop. Enlargement of
isting Levee, with Crib
all on Landside
ting Bridge
der Construction
Prop. Landside Enlargement of Existing Levee
Proposed Levee
Existing Stone Revetment
HIGHWAY
Proposed Landside Enlargement of Existing Levee
N.Y. STATE
Ball Pk.
AB-20
D.L.&W.
Sewage Disposal Plant
Proposed Levee
Existing Levee, to be Removed


Proposed Reinforced Concrete Wall
W.S. Q=115,000
Prop. Riprap
Existing Concrete Wall
Existing Ground Surface
Channel Bottom
Proposed Sheet Steel Piling

SECTION E-E

SCALE

10 0 10 20 30

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

LOCAL IMPROVEMENT PROJECT

ELMIRA, N.Y.

SHEET 1 OF 3 SHEETS

SCALES: AS SHOWN

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. MAY 20.1939

SUBMITTED: SENIOR ENGINEER

RECOMMENDED: PRINCIPAL ENGINEER

APPROVED: MAJOR, CORPS OF ENGINEERS, U.S. ARMY, DISTRICT ENGINEER

DRAWN BY: K.G.L.
TRACED BY: E.H.W.
CHECKED BY: A.L.

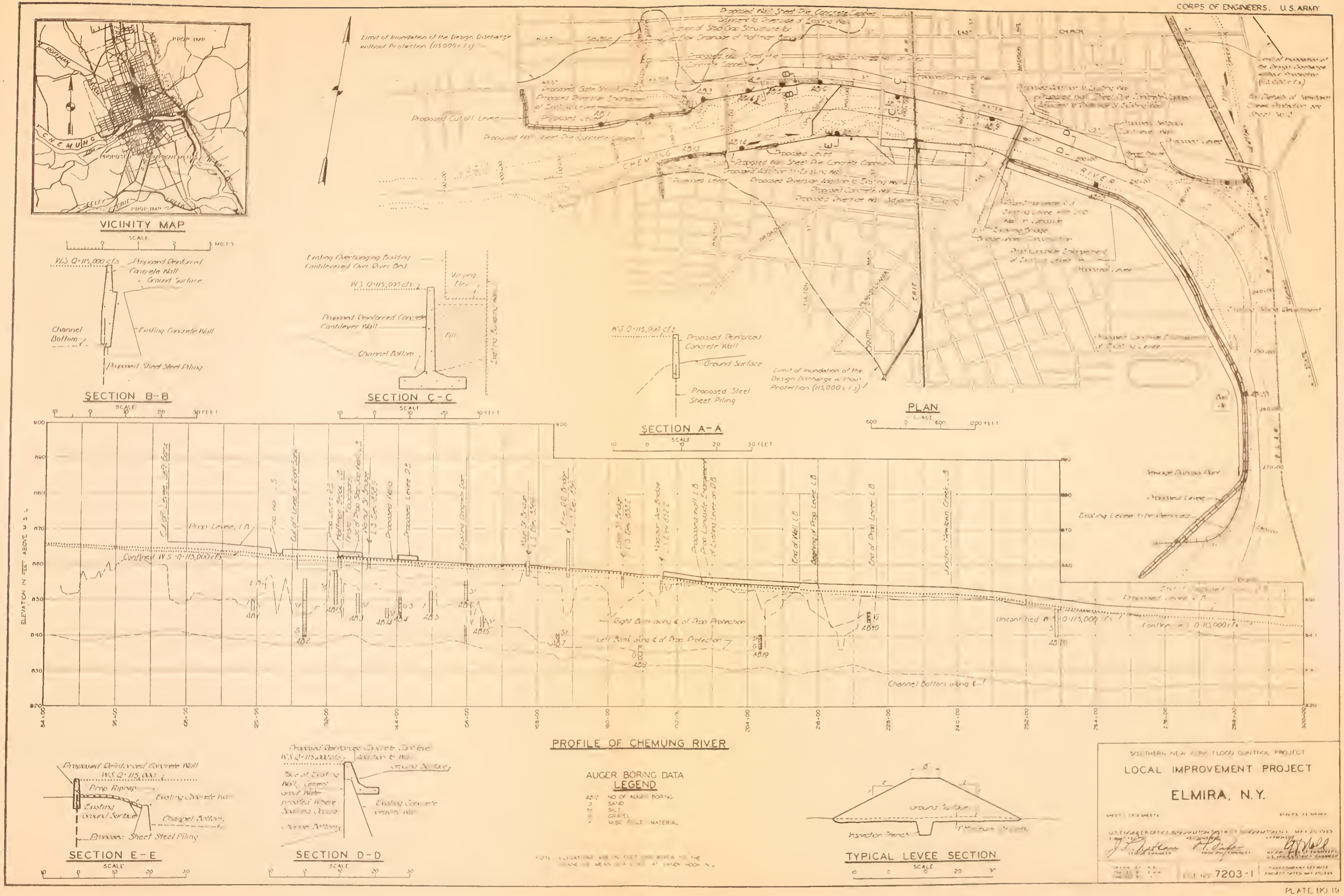
FILE NO. 7203-1

TO ACCOMPANY DEFINITE PROJECT DATED MAY 20,1939

PLATE NO. 19

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY


VICINITY MAP
SCALE
MILES
HOFFMAN
CHEMUNG
PROP. IMP.
SECTION B-B
W.S. Q-115,000 c.f.s.
Proposed Reinforced Concrete Wall
Ground Surface
Channel Bottom
Existing Concrete Wall
Proposed Sheet Steel Piling
SECTION C-C
Existing Overhanging Building Cantilevered Over River Bed
Proposed Reinforced Concrete Cantilever Wall
Varying Elev.
Fill
Channel Bottom
SECTION A-A
Proposed Reinforced Concrete Wall
Ground Surface
Proposed Steel Sheet Piling
Limit of Inundation of the Design Discharge without Protection (115,000 c.f.s.)
Proposed Cut-off Levee
Proposed Levee
CHEMUNG
RIVER
PLAN
SCALE
FEET
PROFILE OF CHEMUNG RIVER
ELEVATION IN FEET ABOVE M.S.L.
Prop. Levee L.B.
Confined W.S. Q-115,000 c.f.s.
Unconfined W.S. Q-115,000 c.f.s.
Right Bank along ℄ of Prop. Protection
Left Bank along ℄ of Prop. Protection
Channel Bottom along ℄
Existing Levee to be Removed
Proposed Levee
Junction Newtown Creek
SECTION E-E
Proposed Reinforced Concrete Wall
W.S. Q-115,000
Prop. Riprap
Existing Concrete Wall
Existing Ground Surface
Channel Bottom
Proposed Sheet Steel Piling
SECTION D-D
Proposed Reinforced Concrete Cantilever
Existing Concrete Wall
Channel Bottom
TYPICAL LEVEE SECTION
Ground Surface
Inspection Trench
SCALE
FEET

AUGER BORING DATA

LEGEND

AB1 NO. OF AUGER BORING
S SAND
St SILT
G GRAVEL
V MISC. FILL MATERIAL

NOTE: ELEVATIONS ARE IN FEET AND REFER TO THE PLANE OF MEAN SEA LEVEL AT SANDY HOOK N.J.

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

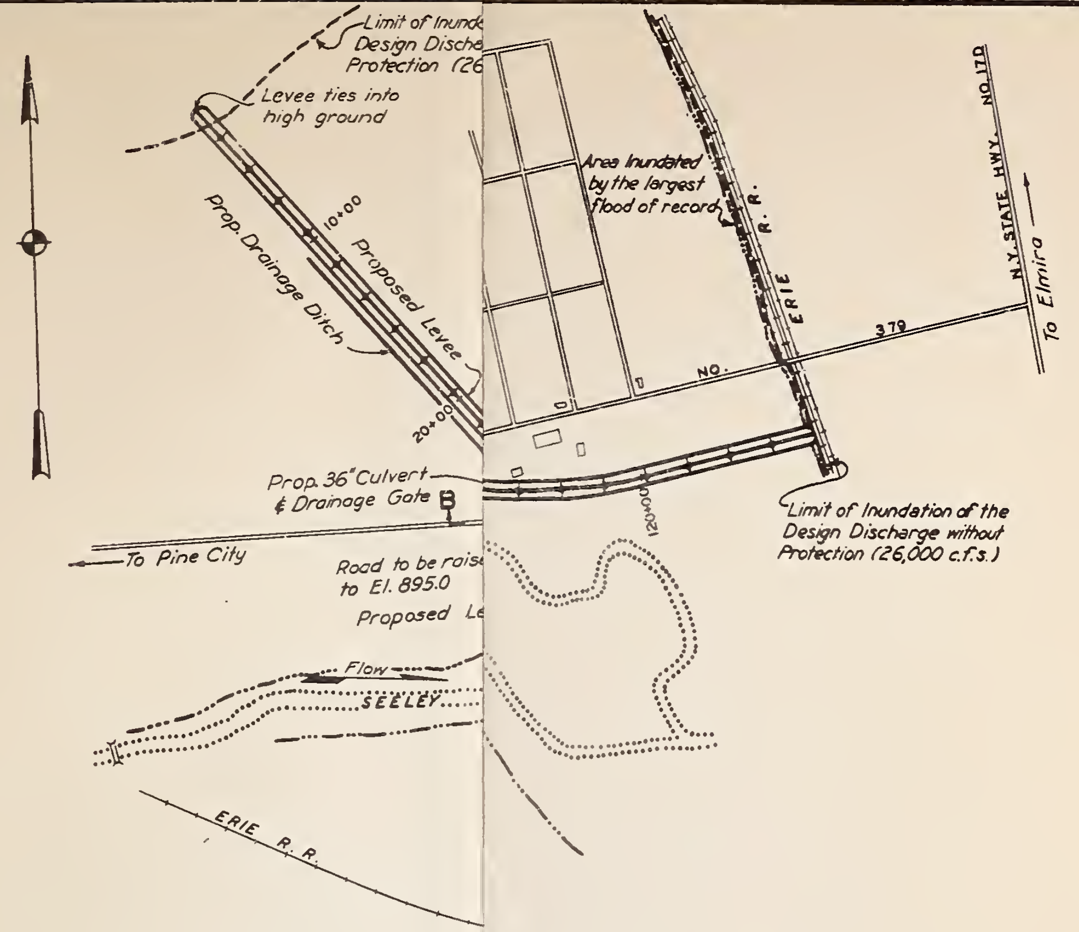
LOCAL IMPROVEMENT PROJECT

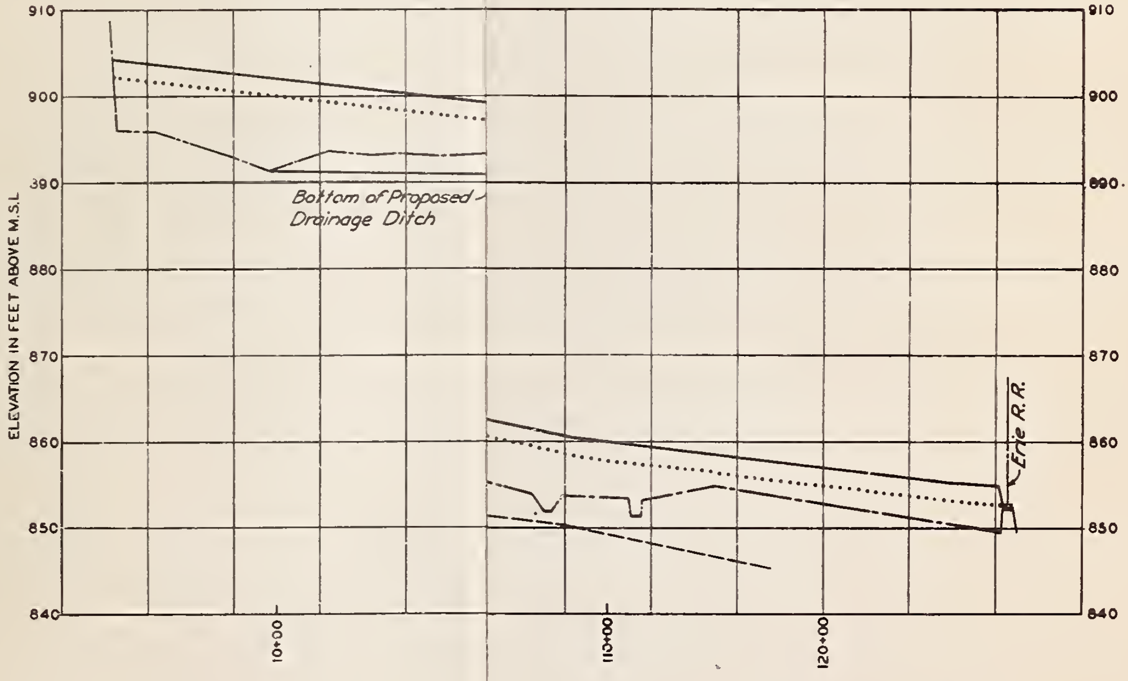
ELMIRA, N.Y.

J. T. Nolan F. L. Piper G. J. Noll

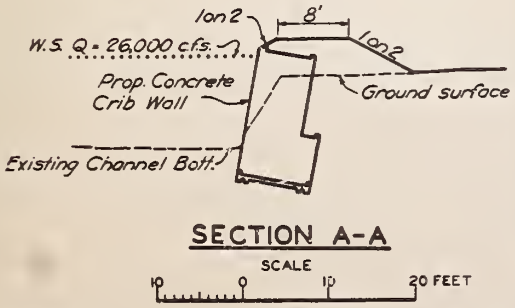
7203-1

PLATE NO. 19


Limit of Inunda
Design Disch
Protection (26
Levee ties into high ground
Prop. Drainage Ditch
Proposed Levee
10+00
20+00
Area Inundated by the largest flood of record
ERIE R. R.
N.Y. STATE HWY. NO. 17D
To Elmira
NO. 379
Prop. 36" Culvert & Drainage Gate
B
120+00
Limit of Inundation of the Design Discharge without Protection (26,000 c.f.s.)
To Pine City
Road to be raise to El. 895.0
Proposed Le
Flow
SEELEY
ERIE R. R.



NOTE:
ELEVATIONS ARE IN FEET AND REFER TO THE PLANE OF MEAN SEA LEVEL AT SANDY HOOK, N.J.


1on2
8'
1on2
W.S. Q = 26,000 c.f.s.
Prop. Concrete Crib Wall
Ground surface
Existing Channel Bott.
SCALE
10
0
10
20 FEET

SECTION A-A

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

LOCAL IMPROVEMENT PROJECT

ELMIRA, N.Y.

SHEET 2 OF 3 SHEETS

SCALES: AS SHOWN

U.S. ENGINEER OFFICE BINGHAMTON DISTRICT, BINGHAMTON, N.Y. MAY 20, 1939

SUBMITTED:
SENIOR ENGINEER

RECOMMENDED:
PRINCIPAL ENGINEER

APPROVED:
MAJOR, CORPS OF ENGINEERS
U.S. ARMY, DISTRICT ENGINEER

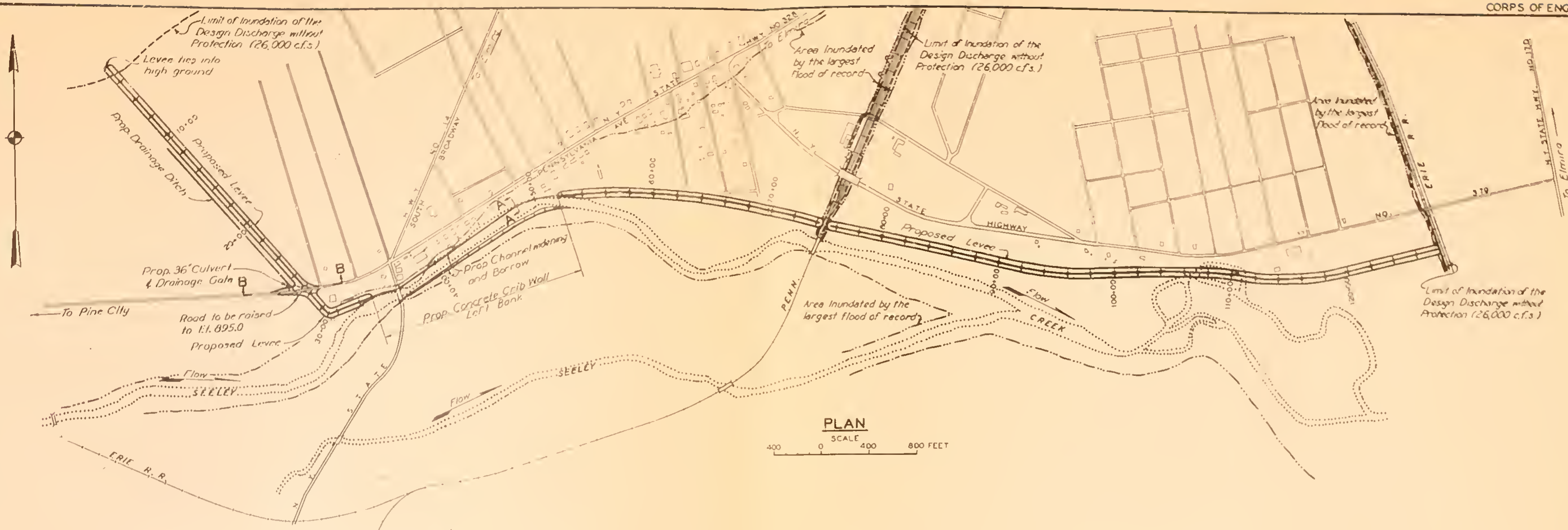
DRAWN BY: R.D.S.
TRACED BY: H.O.W.
CHECKED BY: A.L.

FILE NO. 7203-2

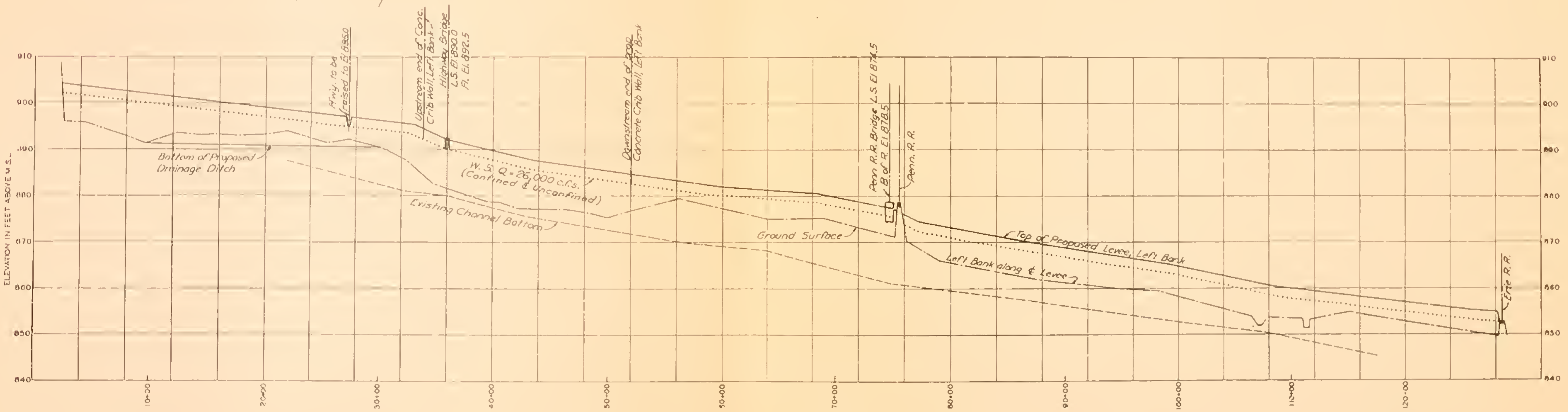
TO ACCOMPANY DEFINITE PROJECT DATED MAY 20, 1939

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY


Limit of Inundation of the Design Discharge without Protection (26,000 c.f.s.)
Levee ties into high ground
Prop. Drainage Ditch
Proposed Levee
10+00
20+00
30+00
Prop. 36" Culvert & Drainage Gate
B
To Pine City
Road to be raised to El. 895.0
Proposed Levee
Flow
SEELEY
ERIE R.R.
STATE
SOUTH
N.Y.
BROADWAY
NO. 14
PENNSYLVANIA AVE
N.Y. STATE HWY. NO. 328
To Elmira
A
Prop. Channel Widening and Borrow
Prop. Concrete Crib Wall Left Bank
Flow
SEELEY
60+00
70+00
80+00
90+00
100+00
110+00
120+00
Area Inundated by the largest flood of record
Limit of Inundation of the Design Discharge without Protection (26,000 c.f.s.)
PENN.
Area Inundated by the largest flood of record
N.Y. STATE HIGHWAY
Proposed Levee
Flow
CREEK
Area Inundated by the largest flood of record
ERIE R.R.
NO. 17
N.Y. STATE HWY. NO. 17
To Elmira
Limit of Inundation of the Design Discharge without Protection (26,000 c.f.s.)
SCALE
400 0 400 800 FEET

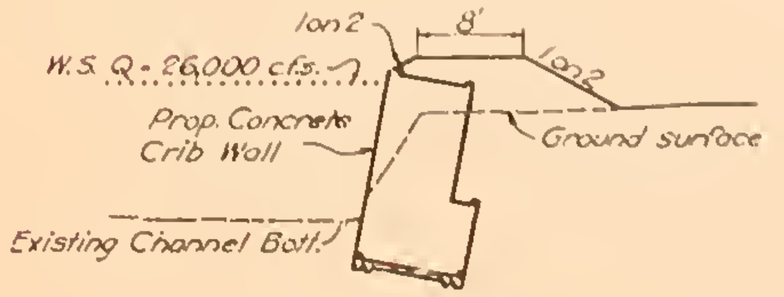
PLAN



PROFILE

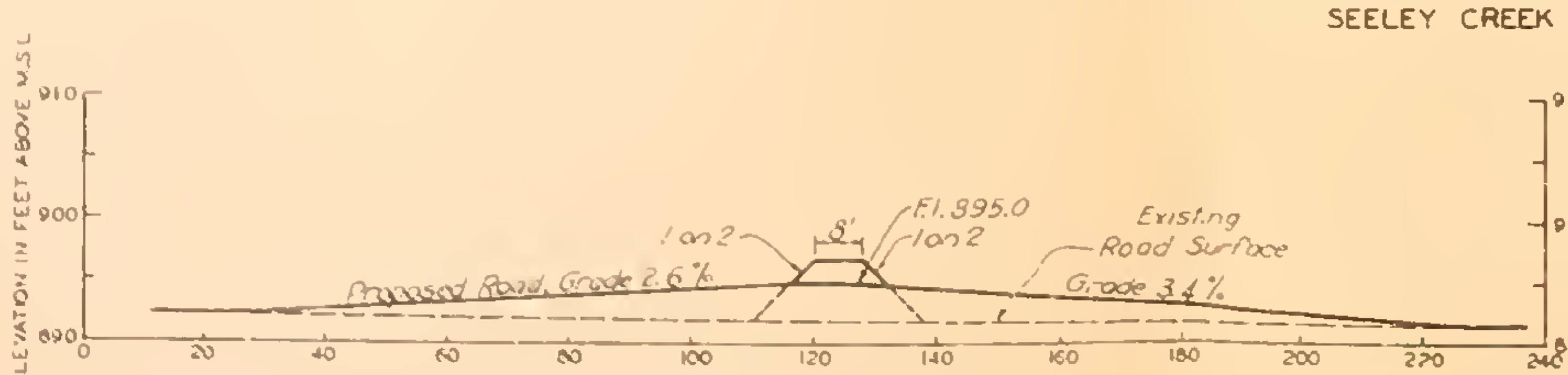
ALONG CENTER LINE OF PROPOSED LEVEE
SEELEY CREEK

NOTE
ELEVATIONS ARE IN FEET AND REFER TO THE PLANE OF MEAN SEA LEVEL AT SANDY HOOK, N.J.

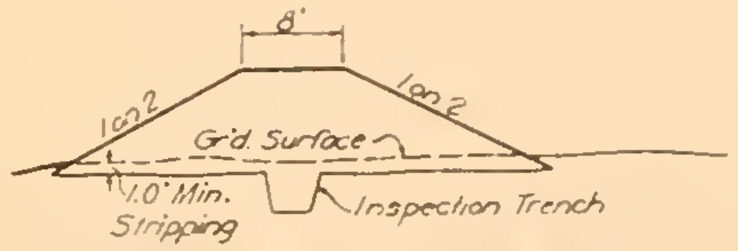

1 on 2
8'
1 on 2
W.S. Q = 26,000 c.f.s.
Prop. Concrete Crib Wall
Ground surface
Existing Channel Bott.

SECTION A-A

SCALE
10 0 10 20 FEET


ELEVATION IN FEET ABOVE M.S.L.
910
900
890
1 on 2
8'
El. 895.0
1 on 2
Existing Road Surface
Proposed Road, Grade 2.6%
Grade 3.4%
0
20
40
60
80
100
120
140
160
180
200
220
240

SECTION B-B


8'
1 on 2
1 on 2
Gr'd Surface
1.0' Min. Stripping
Inspection Trench

TYPICAL LEVEE SECTION

SCALE
10 0 10 20 FEET

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

LOCAL IMPROVEMENT PROJECT

ELMIRA, N.Y.

SHEET 2 OF 2 SHEETS

SCALES: AS SHOWN

U.S. ENGINEER OFFICE BINGHAMTON DISTRICT, BINGHAMTON, N.Y. MAY 20, 1939

SUBMITTED: J. L. Chatham
SENIOR ENGINEER

RECOMMENDED: [illegible]
PRINCIPAL ENGINEER

APPROVED: [illegible]
MAJOR, CORPS OF ENGINEERS
U.S. ARMY, DISTRICT ENGINEER

DRAWN BY: R.D.S.
TRACED BY: H.O.W.
CHECKED BY: A.L.

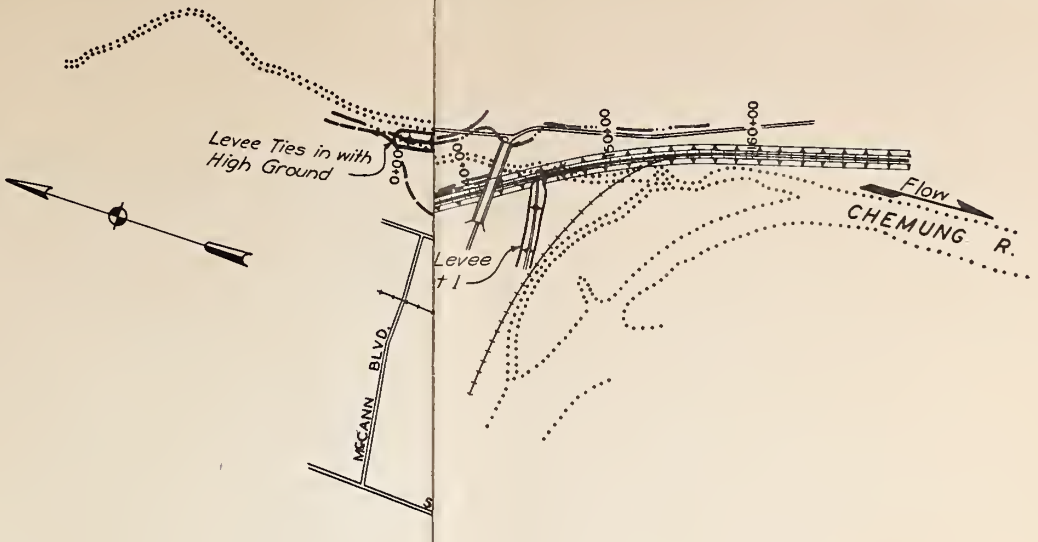
FILE NO 7203-2

TO ACCOMPANY DEFINITE PROJECT DATED MAY 25, 1939

PLATE NO. 20

WAR DEPARTMENT

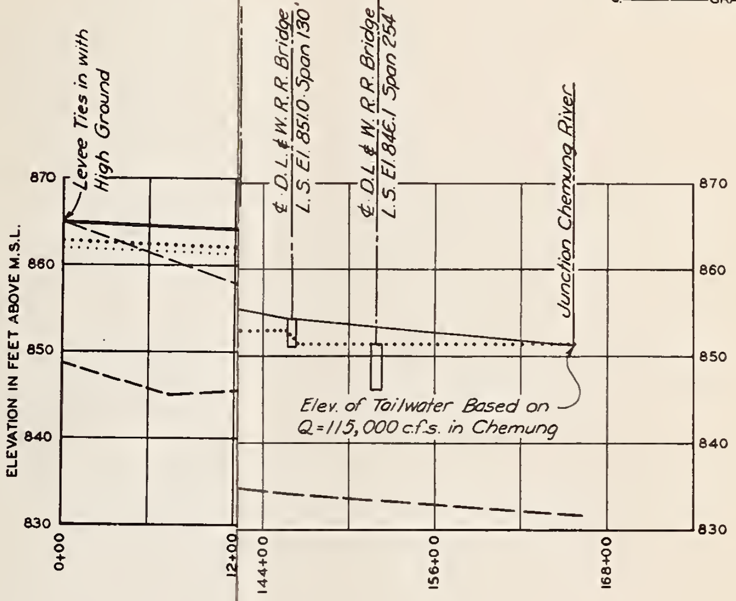
CORPS OF ENGINEERS, U.S. ARMY

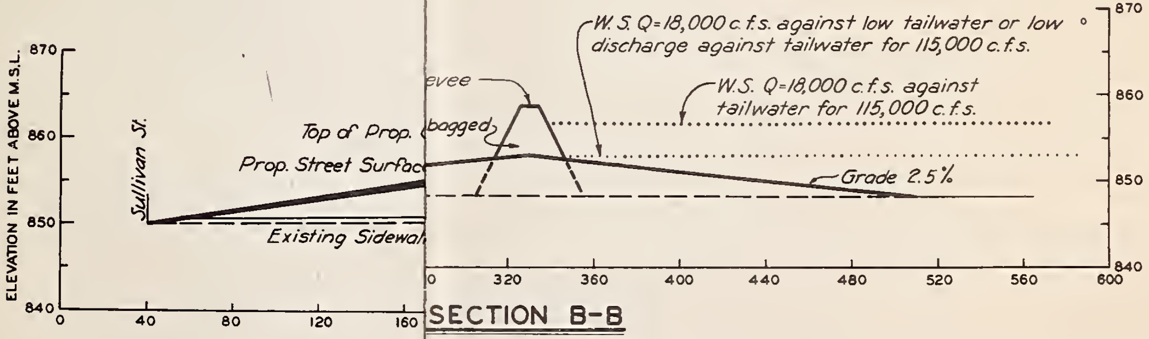

Levee Ties in with High Ground
0+00
10+00
50+00
60+00
Levee
Flow
CHEMUNG R.
McCANN BLVD.

LEGEND

AUGER BORING DATA

AB 12 — NUMBER OF AUGER BORING
St. — SILT
S. — SAND
G. — GRAVEL




W.S. Q=18,000 c.f.s. against low tailwater or low discharge against tailwater for 115,000 c.f.s.
W.S. Q=18,000 c.f.s. against tailwater for 115,000 c.f.s.
evee
Top of Prop.
bagged
Prop. Street Surfac
Grade 2.5%
Sullivan St.
Existing Sidewal
ELEVATION IN FEET ABOVE M.S.L.
870
860
850
840
0
40
80
120
160
320
360
400
440
480
520
560
600

SECTION B-B

SOUTHERN NEW YORK FLOOD CONTROL PROJECT

LOCAL IMPROVEMENT PROJECT

ELMIRA, N.Y.

SHEET 3 OF 3 SHEETS

SCALES: AS SHOWN

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. MAY 20, 1939

SUBMITTED: J. L. Nathan SENIOR ENGINEER

RECOMMENDED: W. T. Pifer PRINCIPAL ENGINEER

APPROVED: G. Nold MAJOR, CORPS OF ENGINEERS U.S. ARMY, DISTRICT ENGINEER.

DRAWN BY: M.G.A.
TRACED BY: P.B.
CHECKED BY: A.L.

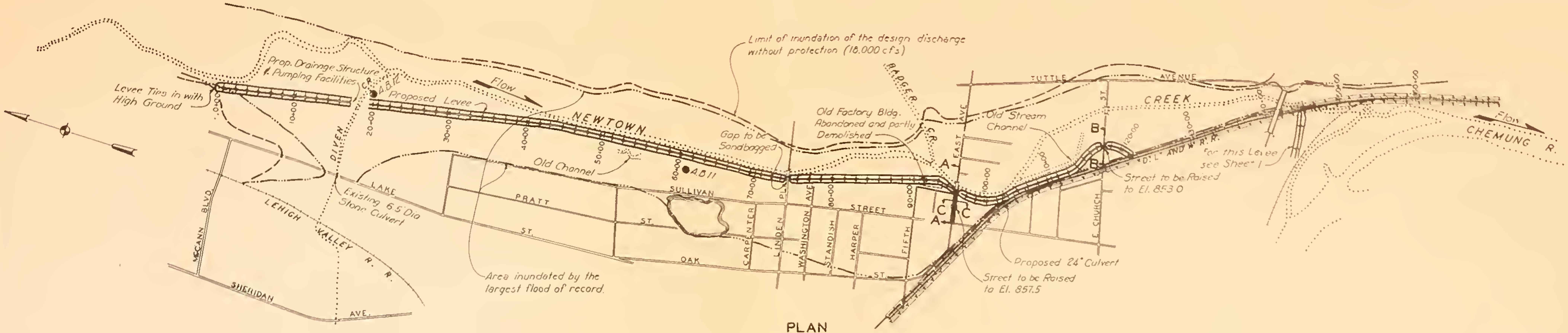
FILE NO. 7203-3

TO ACCOMPANY DEFINITE PROJECT DATED MAY 20, 1939

PLATE NO. 21

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY

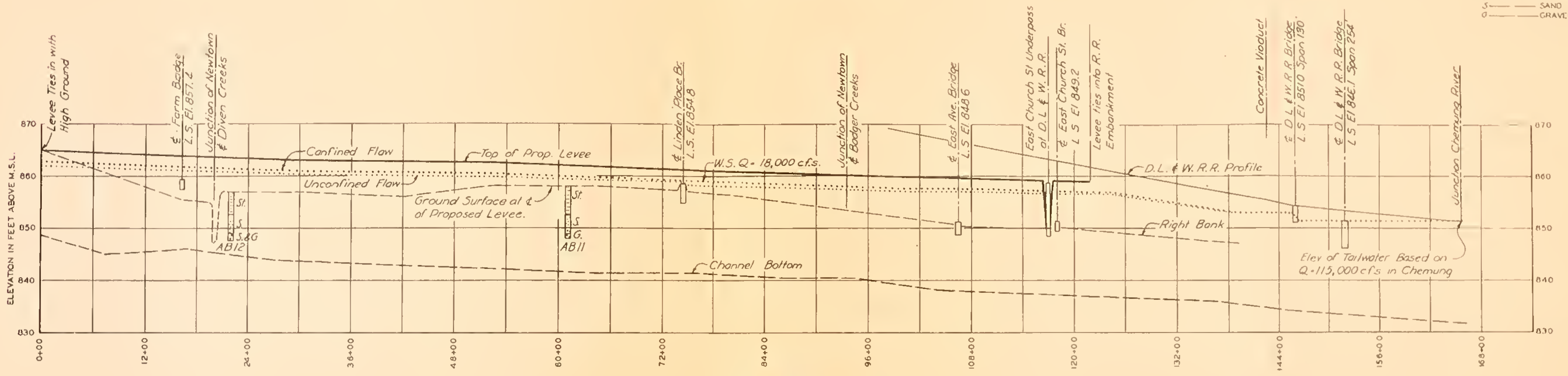

Levee Ties in with High Ground
Prop. Drainage Structure & Pumping Facilities
AB12
Proposed Levee
Flow
NEWTOWN
Limit of inundation of the design discharge without protection (18,000 c.f.s)
BADGER CR.
Gap to be Sandbagged
Old Factory Bldg. Abandoned and partly Demolished
Old Stream Channel
TUTTLE AVENUE
CREEK
EAST AVE.
ST.
B
For this Levee see Sheet 1
D.L. AND W. R.R.
Flow
CHEMUNG R.
Street to be Raised to El. 853.0
Proposed 24" Culvert
Street to be Raised to El. 857.5
A
C
DIVEN
LAKE
Existing 6.5' Dia. Stone Culvert
Old Channel
AB11
SULLIVAN
PRATT
ST.
ST.
OAK
STREET
CARPENTER
LINDEN PL.
WASHINGTON AVE.
STANDISH
HARPER
FIFTH
E. CHURCH
McCANN BLVD.
LEHIGH VALLEY R.R.
SHERIDAN AVE.
Area inundated by the largest flood of record.
0+00
10+00
20+00
30+00
40+00
50+00
60+00
70+00
80+00
90+00
100+00
110+00
120+00
130+00

PLAN

SCALE
600 0 600 1200 FEET

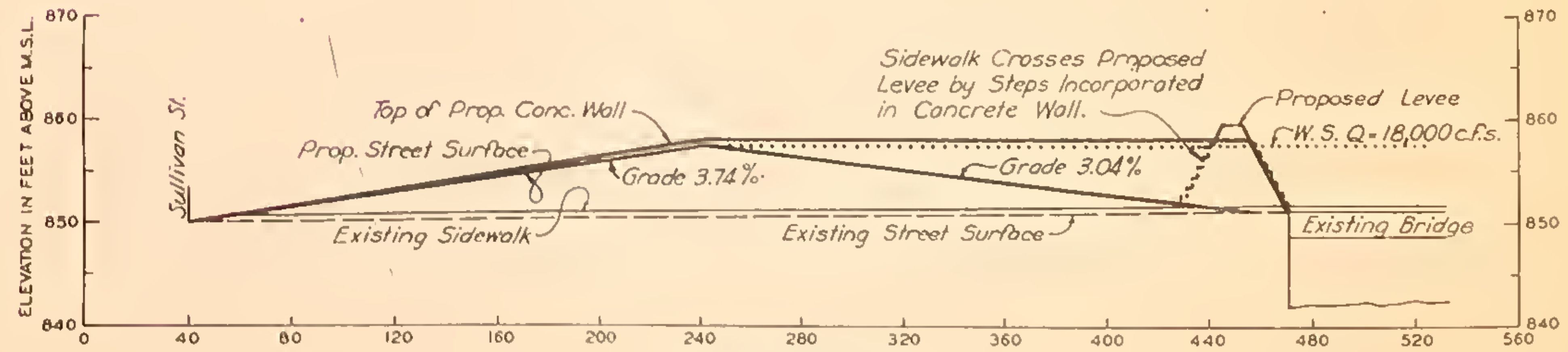
LEGEND
AUGER BORING DATA

AB 12 — NUMBER OF AUGER BORING
St — SILT
S — SAND
G — GRAVEL

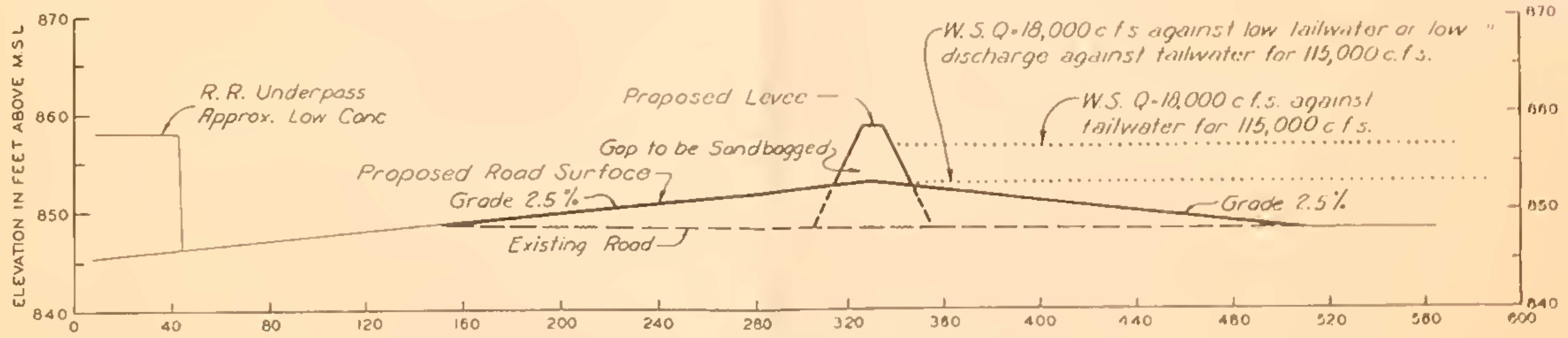


PROFILE

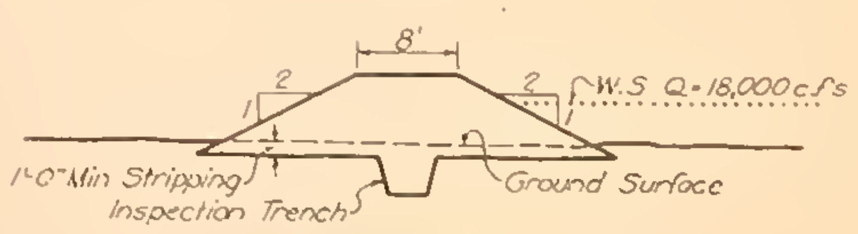
ALONG CENTER LINE OF PROPOSED LEVEE


ELEVATION IN FEET ABOVE M.S.L.
870
860
850
840
Sullivan St.
Top of Prop. Conc. Wall
Prop. Street Surface
Grade 3.74%
Sidewalk Crosses Proposed Levee by Steps Incorporated in Concrete Wall.
Grade 3.04%
Proposed Levee
W.S. Q-18,000 c.f.s.
Existing Sidewalk
Existing Street Surface
Existing Bridge
0
40
80
120
160
200
240
280
320
360
400
440
480
520
560

SECTION A-A

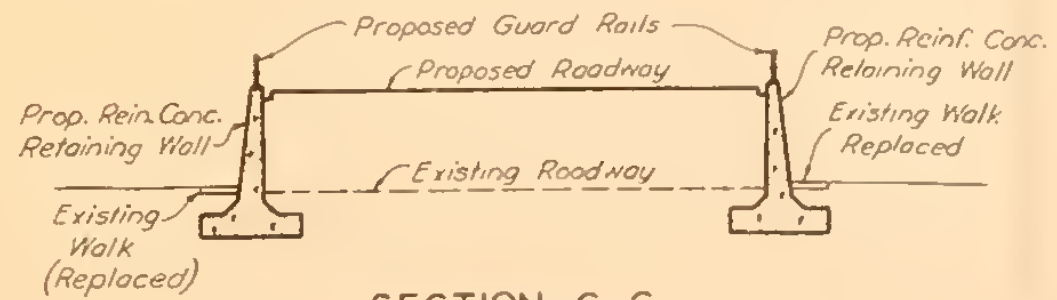

ELEVATION IN FEET ABOVE M.S.L.
870
860
850
840
W.S. Q-18,000 c.f.s. against low tailwater or low discharge against tailwater for 115,000 c.f.s.
R.R. Underpass Approx. Low Conc.
Proposed Levee
W.S. Q-18,000 c.f.s. against tailwater for 115,000 c.f.s.
Gap to be Sandbagged
Proposed Road Surface
Grade 2.5%
Grade 2.5%
Existing Road
0
40
80
120
160
200
240
280
320
360
400
440
480
520
560
600

SECTION B-B


8'
2
2
1
1
W.S. Q-18,000 c.f.s
1'-0" Min. Stripping
Inspection Trench
Ground Surface

TYPICAL LEVEE SECTION

SCALE
10 0 10 20 FEET


Proposed Guard Rails
Proposed Roadway
Prop. Reinf. Conc. Retaining Wall
Prop. Rein. Conc. Retaining Wall
Existing Walk Replaced
Existing Roadway
Existing Walk (Replaced)

SECTION C-C

SCALE
10 0 10 20 FEET

NOTE:
ELEVATIONS ARE IN FEET AND REFER TO THE PLANE OF MEAN SEA LEVEL AT SANDY HOOK, N.J.

SOUTHERN NEW YORK FLOOD CONTROL PROJECT
LOCAL IMPROVEMENT PROJECT
ELMIRA, N.Y.

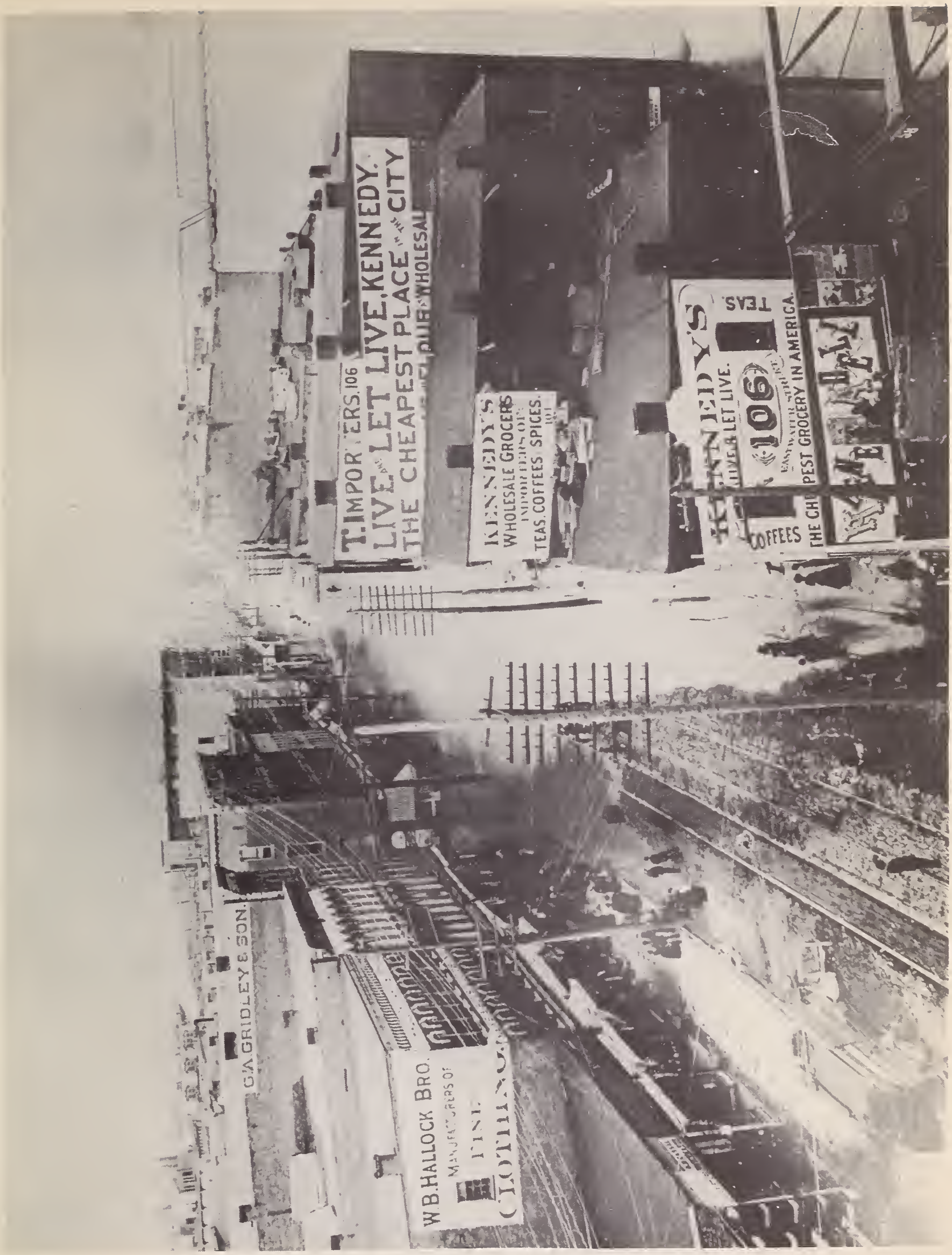
SHEET 2 OF 3 SHEETS
SCALES: AS SHOWN

U.S. ENGINEER OFFICE, BINGHAMTON DISTRICT, BINGHAMTON, N.Y. MAY 20 1939
SUBMITTED BY RECOMMENDED BY APPROVED
SENIOR ENGINEER
PRINCIPAL ENGINEER
MAJOR, CORPS OF ENGINEERS
U.S. ARMY, DISTRICT ENGINEER.

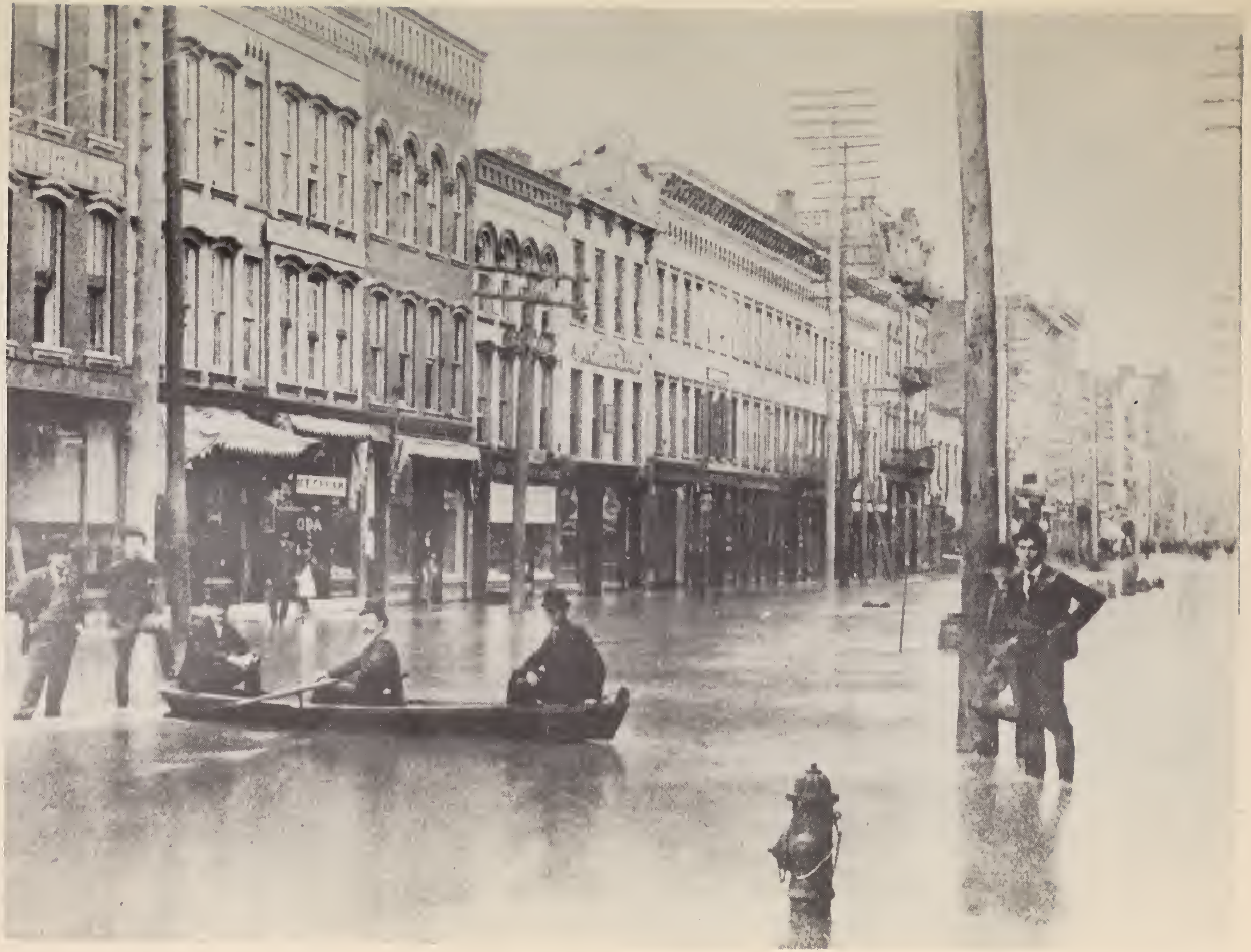
DRAWN BY M.G.A.
TRACED BY P.B.
CHECKED BY A.L.

FILE NO. 7203-3

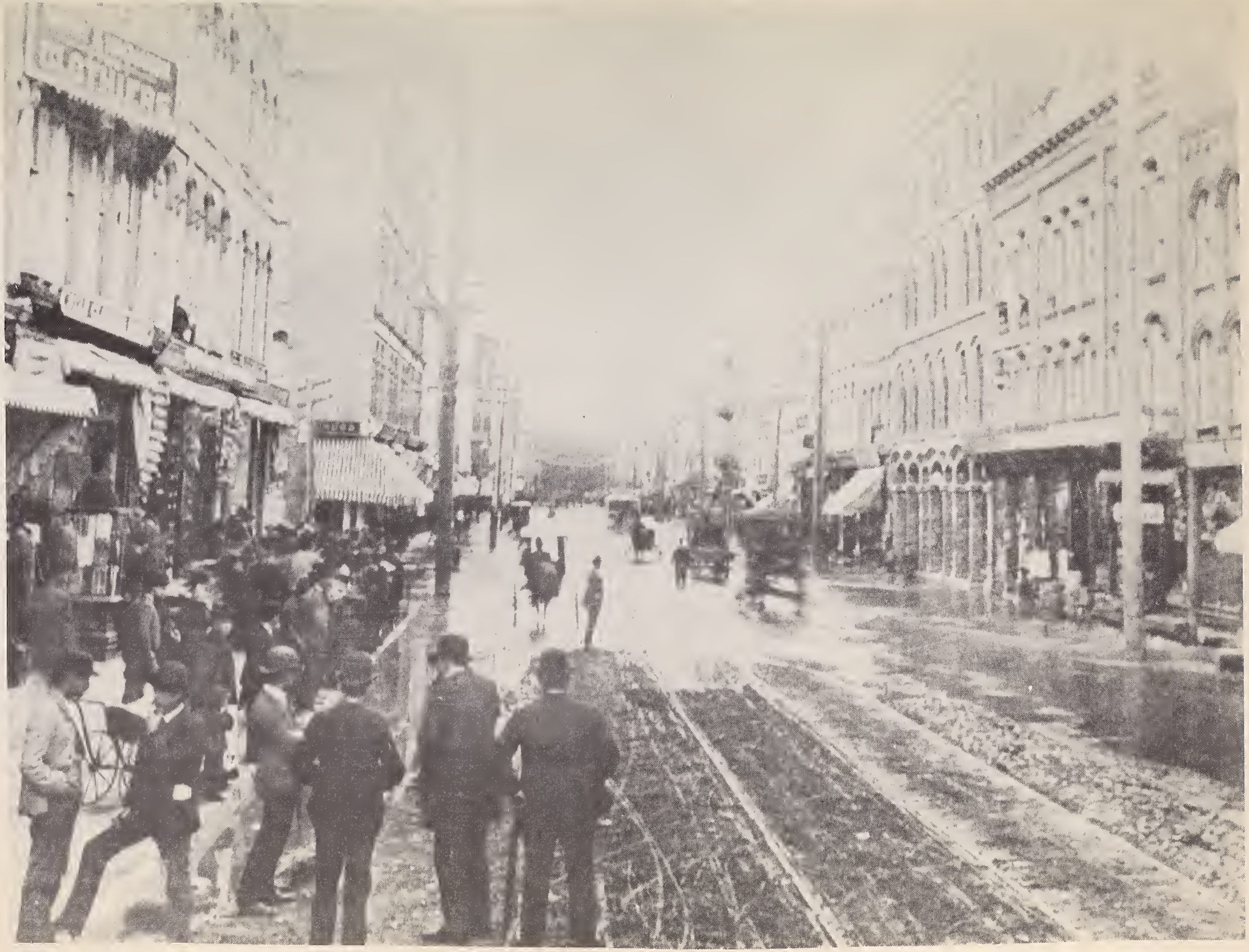
TO ACCOMPANY DEFINITE PROJECT DATED MAY 20, 1939


T. IMPORTERS. 106
LIVE AND LET LIVE. KENNEDY.
THE CHEAPEST PLACE IN THE CITY
KENNEDY'S
WHOLESALE GROCERS
IMPORTERS OF
TEAS, COFFEES, SPICES.
KENNEDY'S
LIVE & LET LIVE.
106
THE CHEAPEST GROCERY IN AMERICA.
TEAS
COFFEES
W.B. HALLOCK BRO.
MANUFACTURERS OF
FINE
CLOTHING
G.A. GRIDLEY & SON.

CHEMUNG RIVER, ELMIRA, N. Y. - FLOOD OF 1889
Water Street above Lake Street.



CHEMUNG RIVER, ELMIRA, N. Y. - FLOOD OF 1889
East Water Street, midway between Lake and Baldwin Streets.



CHEMUNG RIVER, ELMIRA, N. Y. - FLOOD OF 1889
East Water Street, below Railroad Avenue.

Plate 24

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